

# **college** **AND UNIVERSITY** **business**

**DECEMBER 1956**

*The Horizontal University*

*Retention of Accounting Records*

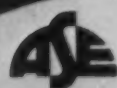
*Establishing an Educational Mortgage Plan*

*Accident Prevention on a College Campus*

*Utilization of Student Labor*

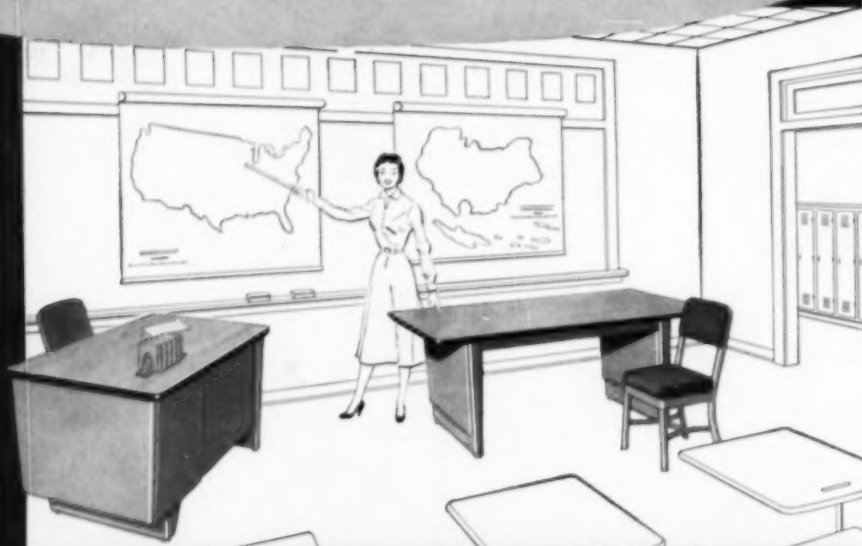


MEN'S RESIDENCE HALL, GUSTAVUS ADOLPHUS COLLEGE, ST. PETERS, MINN. (page 10)



# STEEL FURNITURE AND LOCKERS

MODERN IN STYLE... BUILT FOR SERVICE



SINGLE-TIER LOCKERS



DOUBLE-TIER LOCKERS



BOX LOCKERS



No. 3487 STORAGE CABINET



No. 840 Secretary's Chair



No. 540 Drafting Chair

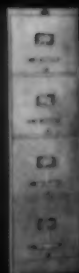
No. 6647 TEACHER'S DESK

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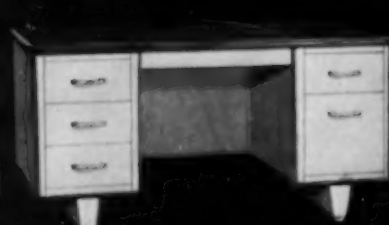
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mering stainless steel frames. Intersecting vertical frame members form symbolic crosses on the facade. The entire building is air conditioned, with a conduit system around the perimeter and a conventional system in the interior. The site provided a below-street-level floor bordered by a landscaped garden, screened from street traffic. On this floor, facing the garden, are a spacious lounge, dining room and auditorium. In this new building, as in thousands of others which have won wide acclaim, SLOAN Flush VALVES are installed throughout.

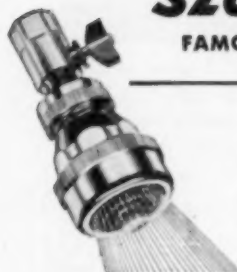
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# college AND UNIVERSITY business

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## Among the Authors



Sydney M. Roth

SYDNEY M. ROTH, president of Roth Brothers & Company of Chicago, specialists in mass market planning and advertising, presents on page 24 his suggestions for the establishment of a mortgage plan for financing costs of higher education. The plan to finance the higher education of qualified students on a loan basis, utilizing private investment capital, is the outgrowth of Mr. Roth's wide experience, his inventive turn of mind, and his deep interest in people covering many years in educational, philanthropic and community affairs. Mr. Roth served for many years as president of both the Community Child Guidance Centers of Chicago and the Individual Psychology Association. He was founder and publisher of the American edition of the *International Journal of Individual Psychology*, of which the late Alfred Adler was editor-in-chief. He considers his association with this world famous psychiatrist to be one of the most rewarding experiences of his life. Mr. Roth originally planned to be a psychiatrist, but opportunities in the business world diverted him from this career. However, his interest in psychology has never waned.



Leonard P. Vidger

LEONARD PERRY VIDGER, visiting assistant professor of accounting at the University of Idaho, on page 29 submits his recommendations on the maintenance of accounting procedures for inter-fund transactions. Mr. Vidger has been in his present position since 1954; prior to that time he served as instructor in economics and business administration and as college controller at Seattle Pacific College. During World War II, he was on active duty as a naval reserve officer from 1941 to 1946, holding various accounting and administrative positions. His first job in business was that of accountant and office manager for a motor company in North Dakota. He has written for various professional journals in the field of accounting.

FRANCES A. BARRY, assistant bursar, Barnard College of Columbia University, makes suggestions on page 27 regarding the proper retention of accounting records. As the years pile up, the establishment of an institutional policy in regard to which accounting records to retain and which to eliminate becomes a necessity. Miss Barry has been in her present position at Barnard since 1945, but first joined the administrative staff in 1943. Before that time she served for nine years with the Community Service Society of New York as an office assistant, and in earlier work was associated with the clerical staff of the Reader's Digest Association, Pleasantville, N.Y. Miss Barry is a former president of the woman's law class of the alumnae association of New York University.



L. H. Lippincott

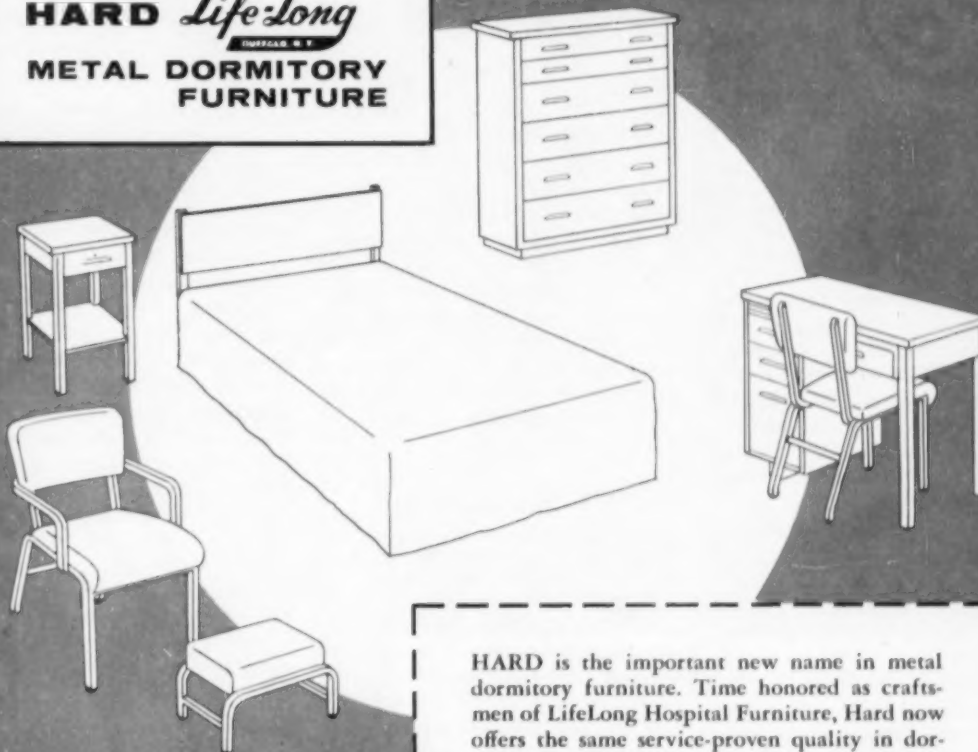
LINCOLN H. LIPPINCOTT, director of accident prevention at Yale University, New Haven, Conn., has been interested in safety and insurance problems for many years. He was manager of the New Haven Safety Council for more than seven years, and before that time served as safety engineer for the Lumbermens Mutual Casualty Company for a 10 year period. During this time he traveled extensively and made more than 1500 talks to audiences in 31 states and Canada on safety of all types. He has taught public speaking and has written a textbook on the subject that has not yet been published.

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# QUESTIONS AND ANSWERS

## Student Housing

**Question:** What should be an institution's attitude toward single students versus married students so long as there is a shortage of housing facilities for both groups?—A.P., N.M.

**ANSWER:** It has been the policy of most, if not all, institutions to provide housing facilities for single students in preference to married students in cases where there is a shortage of facilities for both groups. There are two reasons for this. (1) The appearance of great numbers of married students on campuses has been a development since World War II, and (2) the institution is able to gain more spaces per single student for a given sum of money spent in construction than for married students, because of the obviously higher cost of apartment construction.

It is apparent, however, that the trend of the last two or three years is toward the construction of housing facilities for married students, in recognition of the fact that in the foreseeable future a goodly percentage of students will be married (some schools indicate as high as 25 per cent).

In terms of total units being built, such construction is small in proportion to new construction for single students, but it is significant that institutions have recognized the change and have begun to accept the philosophy that permanent housing facilities for married students must be given proportionate consideration.

Unfortunately, the problem does not end there. Any important addition to housing facilities for married students must be followed by such considerations as schooling for children, adequate police and fire protection, and other community requirements. Thus the cost to an institution is sometimes difficult to determine in advance of married student housing developments.

When there is presently registered a significant percentage of married students and when there are not reasonably adequate housing facilities for these students in the area, an institu-

tion would probably be well advised to construct a representative number of apartments and increase the number as time goes on. I know of no schools having any trouble in keeping housing facilities for married students filled. However, it also is important to evaluate the situation with respect to housing single students inasmuch as the latter group will continue to receive primary consideration.—JOSEPH P. NYE, *director of residence halls, Columbia University.*

## Merit Salary Increases

**Question:** Is an automatic system of promotion and salary increases preferable to one based on merit?—C.G., Wis.

**ANSWER:** An automatic system of promotions and salary increases is, in most cases, not preferable to one based on merit. A merit plan makes it possible to reward those who are doing the best job and are most capable. This is best for employee morale and certainly is best for the employer as it gives some assurance that employees are promoted and are being paid according to their ability. The merit plan does call for the employer to have an adequate work performance rating plan to make sure that personalities are not allowed to become a factor in the determination of promotions and rate increases.—J. N. EWART, *director, office of nonacademic personnel, California Institute of Technology.*

**If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.**

## Losses in Sports Supplies

**Question:** What about losses in athletic clothing and supplies? What is excessive? Does marking the socks and T shirts increase or decrease theft hazards?—P.D., Calif.

**ANSWER:** We spend approximately \$15,000 annually on athletic clothing and supplies for 12 varsity sports and for intramural use. Our losses average about \$100 a year. (Because of the location of our baseball field, it is impossible to find balls hit over the fence. These losses, therefore, are excluded.) The custodian considers a loss of 1 per cent excessive for us. He also said that marking T shirts enhances their souvenir value and increases the amount of loss. We use gray shirts of good quality which, after many launderings, fade considerably, but remain distinct from the white shirts generally sold. Thus a cheap white T shirt cannot be returned in place of an issued shirt.

An equipment card is made out for each participating student, the color of the card identifying the sport. Each item issued is noted on this card. Equipment is replaced only when the old item is returned, e.g. a dirty towel must be turned in for a clean one, and a broken bat with our identification must be returned when a new one is issued. Students are required to pay for lost clothing or supplies. If payment is not made promptly the dean is notified. In the case of seniors, degrees may be withheld, if necessary, pending payment. When freshmen appear for their initial allotment, this procedure is explained to them, and they are told there are no exceptions.

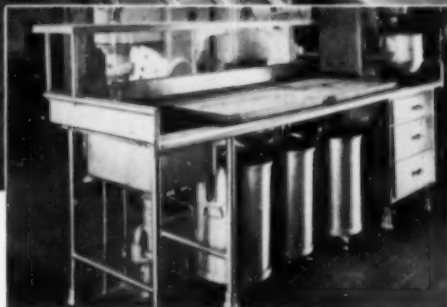
The deans have given the necessary cooperation, and the system has been most effective. Our percentage of loss is probably abnormally low since the custodian issues almost all equipment personally, and during his 29 years' experience he has encountered almost every possible excuse and trick that can cause losses.—JAMES KENNY, S. J., *director of purchases, Fordham University.*



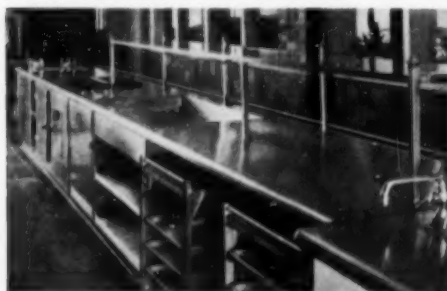
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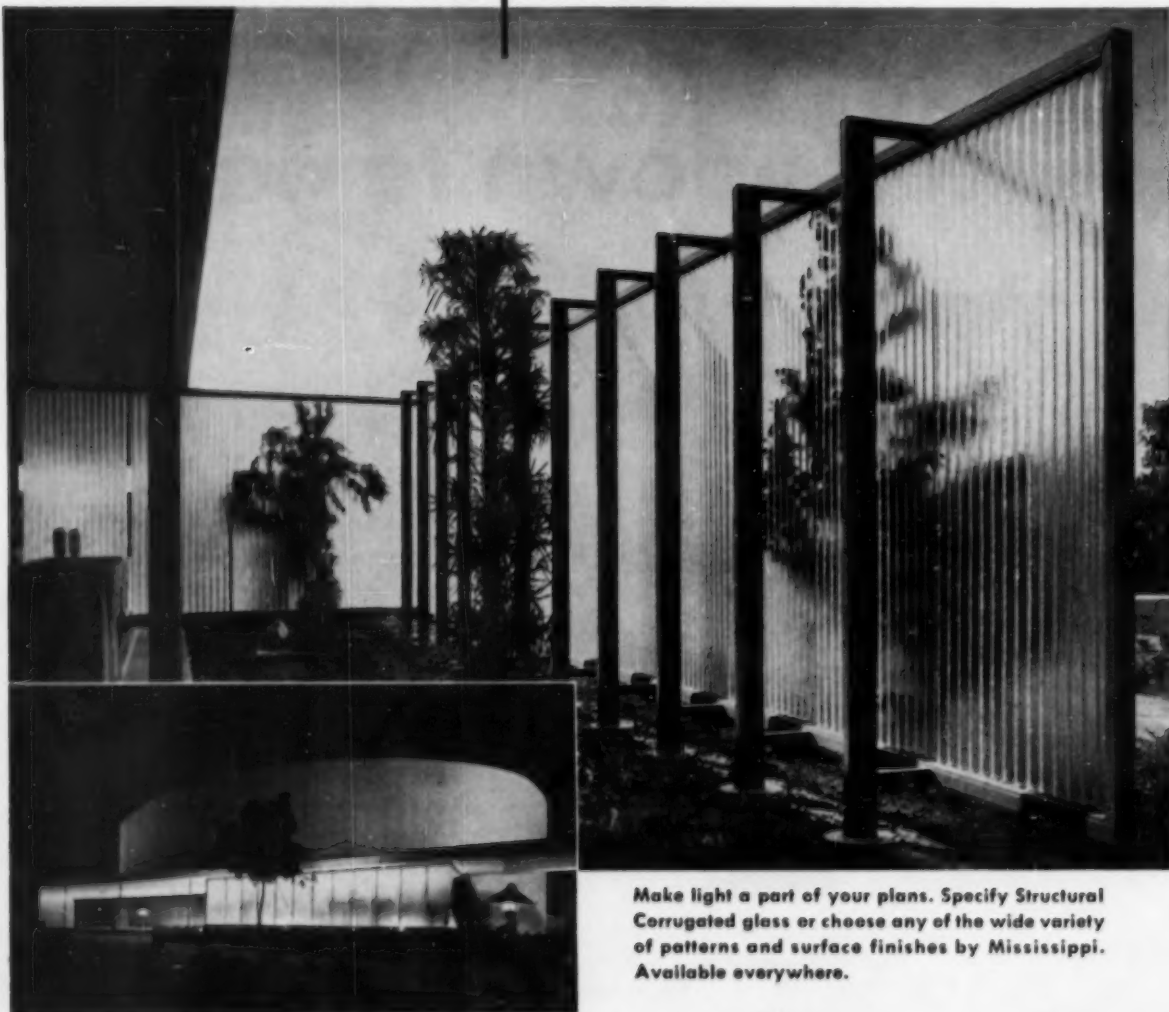
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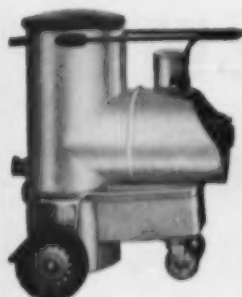
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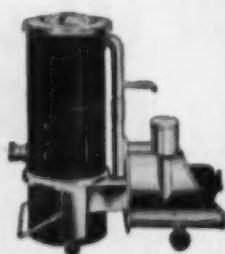
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In many states the coverage of the Plan can be extended to include dismissals or non-medical withdrawals.

Write to us, enclosing your catalog, and we will tell you just how the Tuition Refund Plan will benefit you and your students.

### The TUITION REFUND PLAN

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Educational Insurance Underwriters  
141 Milk Street, BOSTON 9, Massachusetts  
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COLLEGE and UNIVERSITY BUSINESS



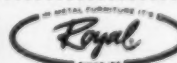
Lovely Royal metal furniture is chip and burn-resistant

the *Royal* look . . . it says, "make yourself at home"



The "dorm" is a home-away-from-home for the student . . . that's why it's important to choose furniture with care. *Royal* is the perfect answer—friendly, durable, conducive to quiet study. It creates prestige, cuts maintenance costs with smooth, beautiful, easy-to-clean surfaces.

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Please send me free *Royal* Steel Furniture Booklets and complete information on *Royal* Design and Room-Planning Service.

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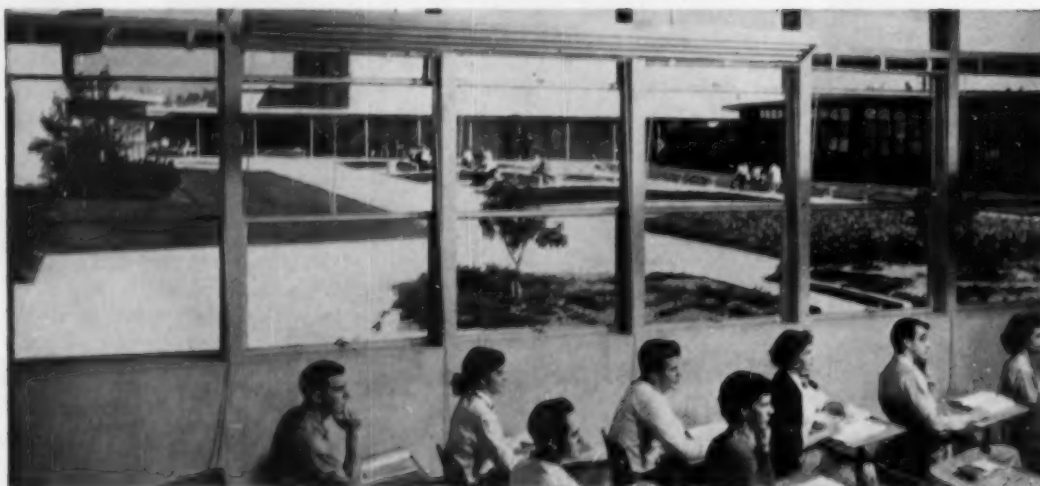
School \_\_\_\_\_

City, Zone, State \_\_\_\_\_

Stephen Watts  
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Architect:  
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**Bring all of this**



**inside for the sake of those in here**

Students live so much of their lives in classrooms. That's why Daylight Walls are vitally important.

44 out of 45 teachers surveyed in a recent research study were highly pleased with classrooms having daylight walls. These comments are typical:

"The lighter, brighter surroundings create a good environment for learning."

"Students do not get tired and restless, because there is no feeling of confinement."

And most of the teachers were quick to admit

that they, too, were a lot happier in classrooms with daylight walls.

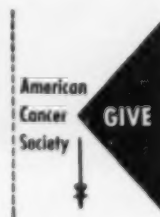
Send for your free copy of this complete research report by Paul R. Hensarling, Director of Administrative Research and School Community Relations for Port Arthur, Texas.

For your free book on school daylighting write to Dept. 48126, Libbey-Owens-Ford, 608 Madison Ave., Toledo 3, Ohio. And for cost estimates, etc., call your Libbey-Owens-Ford Glass Distributor or Dealer (listed under "Glass" in phone book yellow pages).

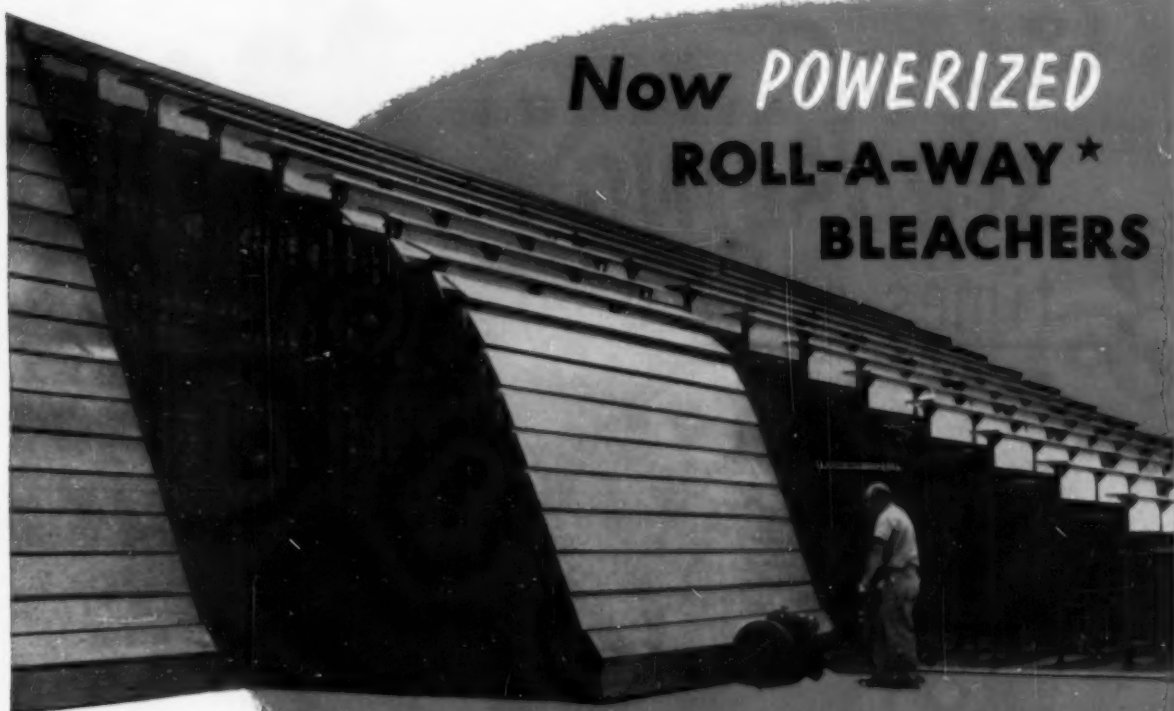


**DAYLIGHT WALLS**

LIBBEY•OWENS•FORD... *a Great Name in Glass*







## Now **POWERIZED** **ROLL-A-WAY\*** **BLEACHERS**

**Universal's new mobile Poweroller\* enables  
one man to do all opening and  
closing of 10, 15, 20  
or more rows**



**No physical effort for custodian;  
Poweroller\* handles all operations  
at touch of switch**

No longer need the operation of folding gymnasium bleachers be a problem involving slow, inaccurate efforts of two, three or four men per section. Now, with *Universal's* new *Poweroller*, all *Roll-A-Way* Bleachers can be operated by one man who opens or closes any section (10, 15, 20 or more rows) in a few seconds... all sections of the gymnasium in just a few minutes... accurately and safely.

*Poweroller* is a compact mobile electric power unit with 100-foot detachable cord which may be plugged into any 100-V AC 60-cycle outlet. To operate, just direct the extended gripper arm into the small opening under the front row seat. This engages an attachment bar under the bleacher section. A slight touch of the handle switch starts action... and you have complete control of the bleacher movement. Pneumatic tires protect the gym floor, yet give *Poweroller* enough traction for positive, easy opening or closing of the bleachers. The operator does nothing but guide the unit from section to section and direct its action. Bleachers may also be opened or closed by hand if ever desired.

Here is gymnasium seating at its best. *Poweroller* not only speeds up operation, but does a more careful job. The gripper arm can make contact at only one spot, the exact center of a section... and the attachment bar assures an even push or pull over the entire area. *Safe, accurate operation is guaranteed!* Powerization is available for all new *Roll-A-Way* installations immediately... and the extra cost is so small that it never needs to be a determining factor. If you are planning a gymnasium, investigate today.

★ T. M. Reg.    \* T. M. Reg.—Pat. Pend.

**UNIVERSAL BLEACHER COMPANY**  
**Champaign, Illinois • Representatives in principal cities**

# are YOU **3** **SCRUBBING** times as hard..



...as you need to?

*The Hillyard Maintaineer has had years of training and experience in every conceivable type of floor problem. He will gladly put this experience at your disposal, help train your staff. There's no charge, no obligation.*

He's "On Your Staff,  
Not Your Payroll."



ST. JOSEPH, MISSOURI  
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LET THE MAINTAINER  
HELP YOU!!

HILLYARD, St. Joseph, Mo.

Yes, I'll take you up! Without charge or obligation, have the Hillyard Maintaineer® show me how to take advantage of new streamlined floor treatment procedures.

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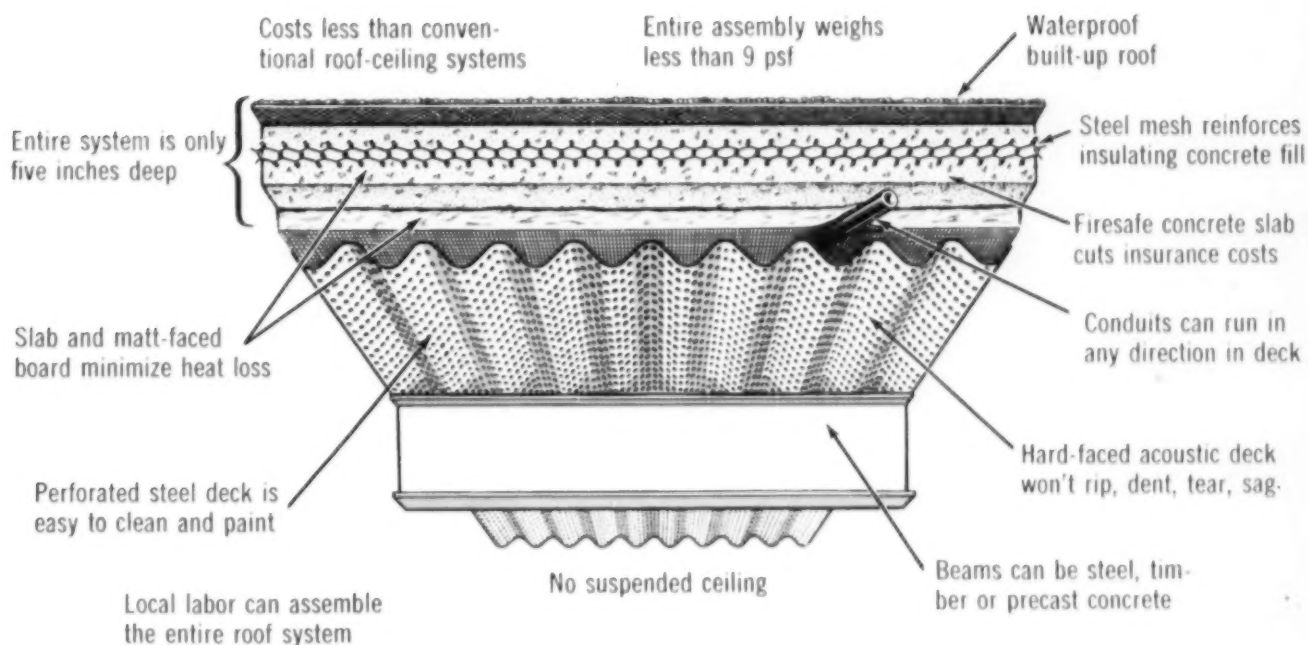
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Have you studied your floor maintenance costs lately? Have you analyzed your cleaning methods to determine whether you are using too many operations—needless rinsing, for example—or are wasting time in prolonged scrubbing when the right cleaner would get the dirt loose in a fraction of the time? Remember, 95c of every floor maintenance dollar goes for labor! Call in your nearby Hillyard Maintaineer® for consultation. He will carefully study your floor problems and recommend (1) modern, streamlined work methods and short cuts, and (2) the tools and materials to enable you to take advantage of the short cuts, to keep your floors in better condition than ever before!

## CASE HISTORY—SCRUBBING

FILE 12

Super Shine-All, Hillyard's Neutral Chemical Cleaner, does the hard part of your work. Gets under and loosens the dirt for easy removal -- yet is non-reacting and safe for any type floor, including asphalt tile. Leaves no residue; requires no rinsing. Cuts out 2/3 of the labor and labor time -- takes the rubbing out of scrubbing! U/L approved slip-resistant.



## NEW IDEA IN SCHOOL ROOFS: STRUCTURAL DECK, LIGHTWEIGHT INSULATION AND ACOUSTIC CEILING COMBINED IN A 5-INCH SYSTEM



# NEW "STRUCTUR-ACOUSTIC" DECK

LOW-COST, INCOMBUSTIBLE DECK WITH ACOUSTIC UNDERSIDE ELIMINATES SUSPENDED

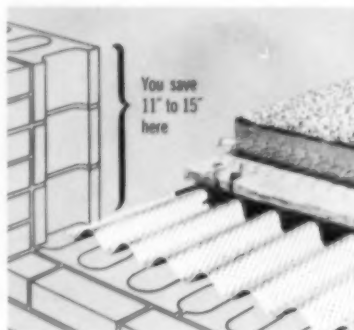
Using a new combination of building materials, research engineers of Granco Steel Products Company have recently perfected an acoustical roof system only 5 inches deep. Heart of the system is STRUCTUR-ACOUSTIC—a galvanized, corrugated

steel sheet with acoustic underside. Demonstrated on these pages are unique features of this new deck and the economical roof system it makes possible . . . news of interest and importance to every designer, builder and planner of schools:



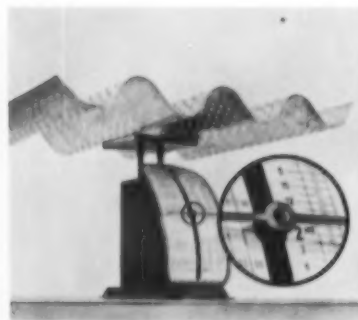
## STRONG

Made of high-tensile, tough-temper steel, Structur-Acoustic serves as structural deck. Photo shows how a sheet of Structur-Acoustic—placed on simulated beams 5' apart—easily supports a 175-lb. man. The entire roof assembly is designed to carry normal roof loads with adequate factor of safety.



## SAVES WALL HEIGHT

Shorter walls mean savings. Structur-Acoustic shortens walls by making possible a roof system only 5" deep! A suspended ceiling system usually requires 16" to 20" in depth. By saving the 11" to 15" in extra wall height needed to enclose this system, you save thousands of dollars in materials and labor.



## LIGHTWEIGHT

Note that Structur-Acoustic weighs only 2 psf. Add 6 psf for concrete and  $\frac{1}{2}$  psf for acoustic board and the result is a roof system weighing less than 9 psf! This means fewer and lighter framing members, smaller columns and footings, lower building costs, faster, easier construction.



## GOOD ACOUSTICS

Structur-Acoustic steel sheets are perforated with a grid of holes  $\frac{5}{32}$ " in diameter, spaced about  $\frac{1}{2}$ " on centers. Tests conducted by Riverbank Acoustical Laboratories indicate that this roof system with a  $2\frac{1}{2}$ " slab provides a Noise Reduction Coefficient of 0.80 and a U factor in excess of 0.14.



## FIRESAFE

Structur-Acoustic is fire-safe and so is the lightweight insulating concrete slab beneath the built-up roof. This important safety benefit protects both the building and its contents and occupants (always a vital consideration in schools!) . . . also helps keep owner insurance costs to a minimum.



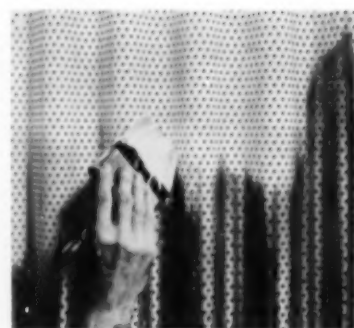
## LOW COST

Structur-Acoustic offers one-third more roof for your dollar than conventional school roofs with similar features. Wall height is saved. Insurance rates and maintenance are reduced. The system is permanent, relies primarily on local labor, keeps building dollars in the community.



## HARD-FACED

Pencil "jab test" proves the rigid toughness of Structur-Acoustic. Paper clips can't dent the surface. Sheets retain their original shape . . . won't rip, tear, sag or stain . . . can be easily cleaned and painted. Low maintenance features make Structur-Acoustic perfect for installation in schools.



## ATTRACTIVE

The clean, corrugated underside of Structur-Acoustic is distinctive in appearance, reflects light, can be painted any color to meet the decorating scheme. Light fixtures are easily attached. Structur-Acoustic is washable, won't dent or lose its shape. Its hard face insures lasting beauty.



# MAKES 5-INCH ROOF SYSTEM POSSIBLE

CEILING, SAVES 11" TO 15" IN WALL HEIGHT, MEETS ALL ROOFING REQUIREMENTS

**EACH MATERIAL IN THE NEW  
STRUCTUR-ACOUSTIC SYSTEM  
SERVES A DOUBLE PURPOSE**

Anchor welding washer ties  
deck to frame and frame to  
slab, resists wind uplift.

Poured slab acts as an in-  
combustible roof deck and  
additional insulation.

Matt-faced acoustic  
board doubles as  
insulation.

Structur-Acoustic serves as  
structural deck and hard-  
faced acoustic ceiling.

Offering rigidity, the permanence of concrete, fire resistance, high insulating value and low dead load, the Structur-Acoustic roof system satisfies all roofing and acoustical requirements. All materials in the system—steel, glass fiber and concrete—serve

for the life of the building. Perforated, corrugated Structur-Acoustic units are fabricated from steel having a minimum yield point of 80,000 psi. This high-strength steel is available in various gauges to meet job framing conditions economically.

## EASY-TO-ASSEMBLE ROOF SYSTEM USES LOCAL LABOR



### EASY TO PLACE

Structur-Acoustic units arrive at the job site conveniently bundled and pre-cut to fit the steel framing. Sheets handle easily, place fast on beams spaced on 4' to 7' centers. Units are welded to structural frame in seconds.



### TAKES ABUSE

In place, Structur-Acoustic withstands normal abuse, becomes a safe working platform for trades. The matt-faced acoustic board placed on top of Structur-Acoustic units is 1" glass fiber board and has a density of 6 pcf.



### FIRM ROOF BASE

The concrete slab provides a firm, inorganic, permanent base for the built-up roof and adds fire safety. Conduits can be run in any direction in the concrete slab. Result: Shortest possible runs using least labor and materials.



### LOCAL LABOR

Application of a waterproof built-up roof completes the job! Note: All materials are assembled at job site by local labor. No bulky assemblies to be fabricated and shipped long distances at high freight rates—a major saving.

TURN THE PAGE



**GRANCO STEEL PRODUCTS CO.**

Dept. SA-167, 6506 N. Broadway, St. Louis 15, Missouri

Please send me without cost or obligation a copy of the new Structur-Acoustic Product Manual No. BT-571.

Name .....

Firm .....

Address .....

City ..... State .....

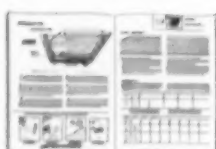
**FREE STRUCTUR-ACOUSTIC  
← CATALOG**

**MAIL THIS COUPON  
← NOW**

**HERE'S WHAT NEW CATALOG CONTAINS**



**1.** Photos, cutaway drawings and complete description of the Structur-Acoustic "triple duty" roof system and its advantages to architects, contractors and owners.



**2.** Step-by-step instructions on roof-system construction...physical properties of Structur-Acoustic... "quick selection" table for one- and two-span roof construction.



**3.** Detail drawings on wall sections, anchor details, eave overhangs, closure angles (sound stop and expansion joint) ... tables on Structur-Acoustic load capacities.



**4.** Information on Structur-Acoustic accessories, suggested specifications...facts on Granco design service and other Granco products for the construction industry.

**STRUCTUR-ACOUSTIC... WHEREVER SOUND CONTROL IS NEEDED**



**SCHOOLS.** Structur-Acoustic roof systems are ideally suited to classrooms, where economy, low maintenance, good acoustics are prime requisites.



**RADIO-TV.** Adaptability of system is shown in new U. of Michigan press box. Structur-Acoustic deadens the chatter of crowds, typewriters, etc.

**WHILE STRUCTUR-ACOUSTIC WAS DEVELOPED WITH CLASSROOMS IN MIND, IT ALSO ADAPTS TO MANY OTHER COMMERCIAL PROJECTS:**

**ONE FLOOR  
OFFICES**

→ Low maintenance of hard-faced acoustic and low first cost place Structur-Acoustic within reach of every new building owner.

**FACTORIES AND  
MACHINERY  
ROOMS**

→ A dependable, economical Structur-Acoustic system offers the forward planner many new opportunities for employee comfort.

**STORES AND  
SHOPPING  
CENTERS**

→ The economies in construction and low maintenance make this roof system perfect for stores and offices in shopping centers.

*Structur-Acoustic is manufactured by*

**GRANCO® STEEL PRODUCTS CO.**

*A subsidiary of GRANITE CITY STEEL COMPANY*

6506 North Broadway, St. Louis 15, Missouri

Executive Offices: Granite City, Illinois

**DISTRICT OFFICES:**  
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*Distributors in  
80 principal cities*



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## AN ANNOUNCEMENT

It is with great satisfaction and pleasure that I announce to our readers and advertisers the purchase as of Nov. 9, 1956, of stock ownership in The Modern Hospital Publishing Company, Inc., publisher of *College and University Business*, by the F. W. Dodge Corporation, whose publications and services include *Architectural Record*, Sweet's Catalog Service, Dodge Construction News Service, and several newspapers in the construction field. This company also has a technical book publishing division and has published several books in the school and hospital fields. This action cements the close affiliation that has existed during the years between our two organizations in various publishing projects, and provides assurance to the higher education field of the same high type of journalistic service that has characterized *College and University Business* during its 10 years of publication.

Under the terms of this arrangement, *College and University Business* retains its entity, with the same personnel responsible for upholding its editorial standards and publishing principles. It is confidently believed, moreover, that, under the aegis of a strong and highly regarded publishing group possessed of the same ideals, new and broader concepts of service will be realized for the benefit of higher education.

On behalf of the officers and editors of *College and University Business*, I take this occasion to thank our readers and advertisers for the evidences of esteem and confidence they have bestowed upon us in the past and to ask their continued support and allegiance to us and our associates in the F. W. Dodge Corporation in achieving new goals in professional magazine publishing.

Raymond P. Sloan

President, The Modern Hospital Publishing Company, Inc.

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## LOOKING FORWARD

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### Fire!

THERE HAS BEEN A DISTURBING INCREASE IN THE number of residence hall fires on college campuses.

Three students at the University of Idaho lost their lives two months ago in an early morning residence hall fire, believed to have been set by an arsonist; fire recently damaged a residence hall for girls at William Woods College, Fulton, Mo.; 20 girls escaped from a fire that damaged the Delta Delta Delta house at Syracuse University, and on November 15 fire caused \$100,000 damage at the Theta Chi fraternity house at the University of Maine.

The danger of a disastrous fire is an ever present hazard on any campus. Uneasy should rest the head of any college executive who has not exhausted every opportunity to improve fire safety conditions on his campus, particularly in areas where students are housed. Executives should have full knowledge of housekeeping standards; they should know how rubbish is handled and the state of electrical wiring in student rooms. They should not rest until they have equipped residence halls with proper exits, signal systems, and fire fighting devices.

This costs money, to be sure. But consider the cost in anguish of relatives and university staff if a fatal or near fatal fire breaks out as the result of administrative neglect of safety procedures. An inquest is never held at a pleasant time or place.

### Educational Mortgages

A RECENTLY PUBLISHED 72 PAGE BOOKLET PREPARED by the editors of *Changing Times*, the Kiplinger magazine, suggests that the rising costs of college tuition may have to be met by granting long-term, low-interest "educational mortgages" to college students and their parents. The report, "Student Loans: Their Place in Student Aid," was supervised by the magazine's editors with the endorsement of the Association of American Colleges.

This report on student loans contains data from 588 American colleges and universities. It has figures on the total amount of money borrowed, the total available for lending, the number of loan applications granted and denied by colleges and universities, and other aspects of student borrowing never before available, according to the editors of *Changing Times*. A program of 15 year, 3 per cent interest loans, or "educational mortgages," is recommended as aid to college students who find that

expenses are too high to be met from current income or from scholarships. According to the proposed plan, student borrowers would be able to obtain the money without co-signers, and would not begin repayment until graduation.

The idea of an "educational mortgage" is not entirely new. For several years Sydney M. Roth, Chicago business executive, has been interested in developing such a program for students and parents. On page 24 of this issue, Mr. Roth outlines his proposal. The plan merits careful study.

### College Housing Guide

AFTER EXTENSIVE RESEARCH AND VISITS TO COLLEGE campuses, the American Institute of Architects has developed a new building reference guide, BT 6-3. Published in the July-August 1956 *Bulletin of the American Institute of Architects*, this summary survey will be of genuine help to college administrators who are planning new residence halls.

The bulletin deals with college housing history and policy and reports a survey by the Association of College and University Housing Officers on space allocation, capacity, construction type, method of food service, and furnishings customarily provided in student rooms. A construction cost study of residence halls is graphically summarized. In connection with this study, the A.I.A. also reports on the relationship that should exist between architect and landscape architect and the client.

College executives will find it profitable to obtain a copy of bulletin BT 6-3. If the A.I.A.'s supply of copies has been exhausted, the architect who customarily handles the institution's work would probably be willing to lend his copy. It's worth reading.

### What Next?

AT YEAR'S END, IT WOULD BE A HARDY SOUL WHO resisted the temptation to sigh, "What next?"

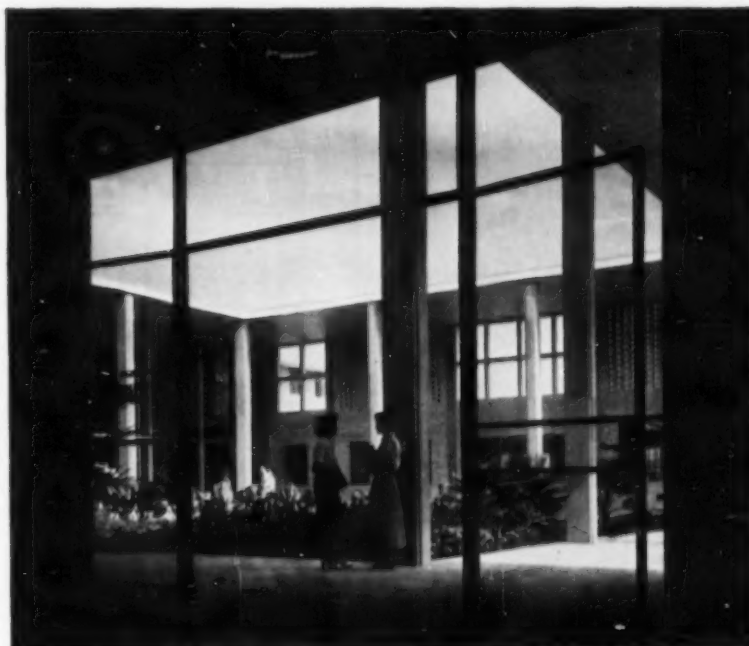
It's been a hectic year. Not enough money, too many students—and not enough staff. On top of that, a presidential election, a Middle East crisis, and revolts in Poland and Hungary.

But in spite of all of it—come 1957—college and university administrators will tackle their jobs with zest, imagination and the will to see them through.

For 1957, good luck!



In this photogenic Administration Building at the University of Hawaii sits a busy vice president. As the dean of faculties, all department chairmen as well as deans of the colleges are responsible to him. There are no separate and duplicating departments in the common subjects in the various schools and colleges.



## THE SMALL HORIZONTAL UNIVERSITY

Fruitful conversation piece among administrators  
now that mass education is in prospect

**WILLARD WILSON**

*Vice President and Dean of Faculties, University of Hawaii, Honolulu*

AS THE WAVE OF NEW STUDENT POPULATION crests above us carrying its froth of academic problems in which many of us almost suffocated during the last five years of the 40's, college and university people are facing the prospect with a wide variety of emotions.

Whatever the implications, it is obvious that most institutions will be asked to carry much heavier loads of all sorts than those for which they were designed. Only the extremely well heeled colleges or those brand new campuses one finds scattered about in the state of California are in the enviable position of being happy about the situation, although I suspect that before long even they will discover problems. To their number

might be added the small liberal arts colleges which exist basically through the support of tuition, and which at least will be able in the next decade to keep their numbers up without too much effort, whatever the highly competitive situation may do to quality.

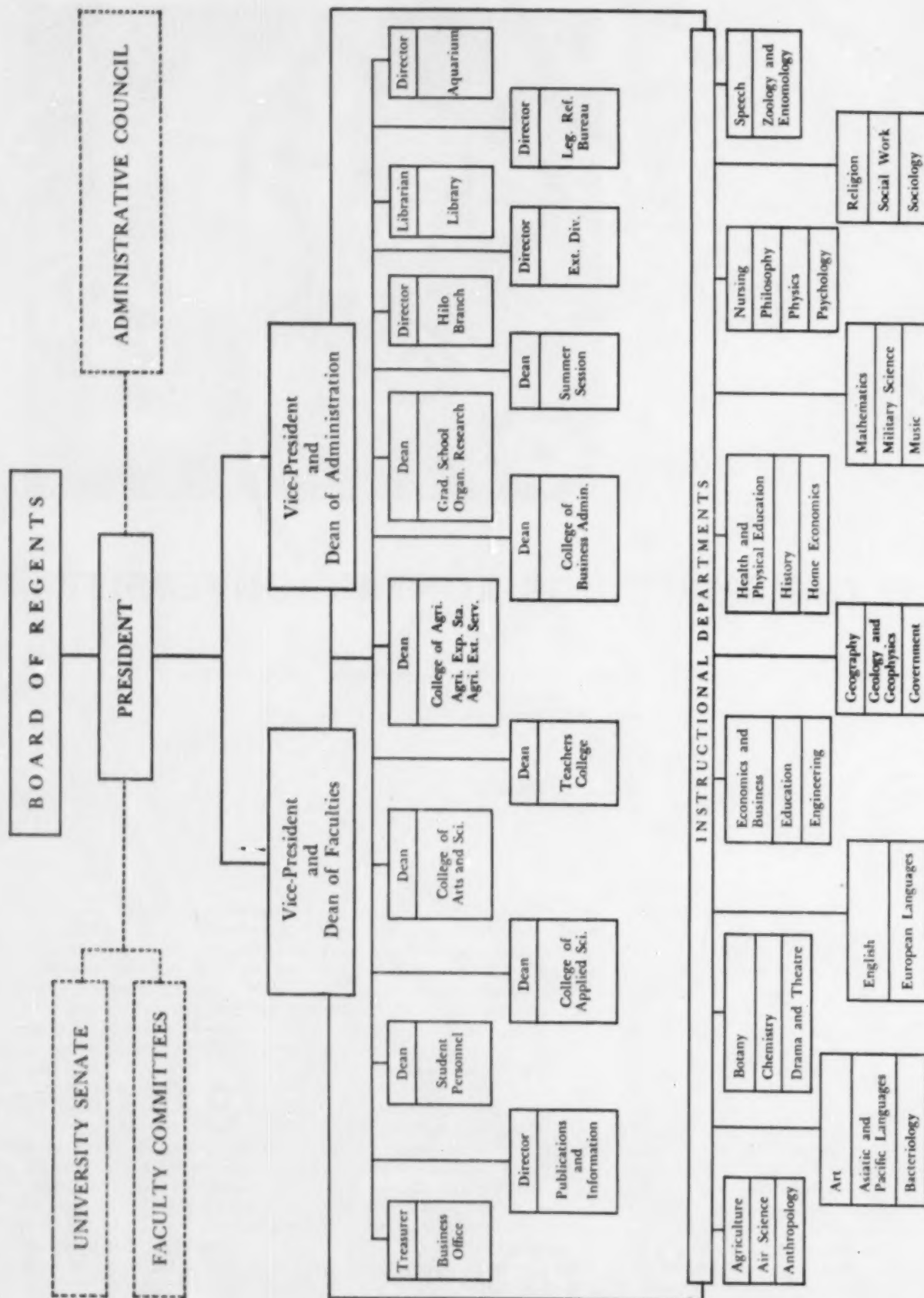
There is little reason to believe that these problems are temporary problems, and it is time we quit talking about the "emergency situation" that confronts us, as though the stupendously increased population of the United States, the higher ratio of college attendance, the increased birth rate, and decreased infant mortality were things that would soon blow over and let us "get back to normal."

However, all of these problems of growth and added responsibility are,

or should be, what one might call "happy problems," and should not dismay us. If we believe what we have been preaching, that the broadening as well as the deepening of the base of education goes with the growth of a democratic nation, we can only get at the job we made for ourselves.

In our general concern over physical facilities and available classroom space as the population load increases in our universities, however, we have sometimes neglected serious thinking with regard to effective and efficient administration, choosing rather merely to allow our college administrative organization to remain static in form while it bulged at the seams in content.

The real problem facing us is, in effect, the vital necessity of increasing



the efficiency of our administrative and academic processes while we load the whole creaking machinery with thousands of extra students, without slicing all the meat off the faculty and losing teaching effectiveness. Moreover, the necessity most of us face is that of having to carry heavier loads of students without increasing proportionately the entire facilities of our institutions.

One approach, a luxurious one not available to most state and land-grant universities in general, has been to say blithely: "Well, here we are. We can take only 2000 students. We are built for that, we are staffed for that, and our organization functions best at that level. We will therefore take our 2000, and after that it is your worry. We shall be happy to skim off the cream, thank you very much!"

This sort of happy and enviable irresponsibility toward the total problem is characteristic of some of the small and good liberal arts colleges that have been able to survive the drought. Most of us not so happily situated envy them deeply. The state and land-grant schools, however, cannot ignore the pressing fact that there are tens of thousands of students with approximately the same intellectual ability as that of the students in our colleges 20 years ago who will not have a place to sit unless we move over. In addition, in our technologically advancing age it is apparent that we must increase the proportion of college trained citizenry. It is not a question of quality *versus* quantity, either; we must have both.

#### WASTE OF MANPOWER

The National Manpower Council, as reported in *Science* of June 5, 1953, stated that of those students with ability to do college work profitably, less than one-half ever gets to college. Only one-third of this group ever graduates. If we are convinced that higher education has any real over-all improving effect on the raw intellect—and evidence is overwhelming that it does—these shocking estimates indicate one of the most dangerous wastes of manpower in our time. The same general conclusions seem to emerge from the book "America's Resources of Specialized Talent," edited by Dean Charles Odegaard of Michigan, a book that should be read humbly by every college administrator and by a great many college professors.

Perhaps this is a somewhat excited

preamble for what follows—a brief and nontechnical exposition of the administrative setup of the University of Hawaii that is being increasingly referred to as the "horizontal plan." But if it is true that economical use of our educational resources is vital at this time in training the mass of educable college students, it follows that any organizational scheme that will facilitate the process and increase our efficiency should be of interest.

Hawaii has such a scheme, and it has been operating successfully for about a dozen years. Mainland university administrators who have encountered it for the first time have had one of two stock reactions after they have grasped its very simple principle—either they are frankly incredulous and say politely, "Interesting, but of course it will not work. All our experience has shown . . ." or they look thoughtful and murmur to themselves, "Maybe you have something. We've been toying with an idea. . . ."

#### DOING ACCEPTABLE JOB

That we are doing an acceptable job academically is evidenced by the above-average performance of our students transferring to mainland colleges and graduate schools, and by the reports of various accrediting agencies with whom we do business; that we are accomplishing this in a notably high-cost area with somewhat spectacular economy is indicated by the fact that in spite of the fact that our salaries are above average on middle brackets, we are nevertheless at the very bottom of the list of 18 comparable western state universities and colleges in per capita student expenditure, as computed in a study made by Montana State University.

In most cases this economy of operation without serious loss of effectiveness has been attributed by those who have studied it to the "horizontal plan" of administration in effect, in which the various colleges of the university do not have separate and duplicating departments in common subjects such as chemistry, English, history and so forth, and so are not under the wasteful necessity of building up competing departments, in subject matter fields, within the various colleges.

It has been our observation that the thoughtful lookers generally are men from privately supported (which often means "unsupported") institutions or from public universities where funds are really tight, for there is no doubt

that the most attractive feature of the plan, although there are others, is its money economy.

Certain features of the University of Hawaii, we feel fairly sure, contributed to the origin of this system of things. The institution is young and comparatively small, with its 50th anniversary just ahead and with its regular daytime student body around the 6000 mark. It grew from a college of agriculture and mechanic arts by the usual process of adding one college at a time, until at present it has five: agriculture, applied science, arts and sciences (liberal arts), business administration, and teachers college.

#### SEPARATE GRADUATE DIVISION

The graduate division is a separate entity. There are, of course, several "programs" that are in what one might consider the college incubation stage. Such is the school of nursing, which for administrative reasons has not yet severed its umbilical connection with applied science, and the school of social work, which lies entirely within the graduate division. There are also the special programs and research projects, in Hawaii preponderantly in the fields of marine biology and agriculture, such as inevitably cluster about the operations of a land-grant college. We have a large and active extension division that functions separately and self-sufficiently in what is called "adult education," and because of well advertised local appeal we have one of the largest summer sessions in the United States.

As the colleges developed originally, they followed the routine pattern in that each college attempted more or less to build its own staff and teaching facilities as a complete entity, its relation to the university being through administrative channels only. Teachers College was most successful in this attempt, having inherited from a preceding normal school a certain autonomy together with what amounted to its own separate buildings. It had what in effect was its own departments of English, science, psychology, mathematics and other subjects, as did to a lesser extent the colleges of applied science and arts and sciences. The dean of a specific college was charged with all the normal coordinating administrative chores, and the department heads reported directly to him.

Even then, of course, there were provisions for students of one college taking courses in another college, un-



Distinctive feature of this residence hall is the grouping of girls in units of 12, each with central living room.

der special circumstances, but it was a creaky business. Inevitably impressions grew up, justified or not, that work offered in basic courses by one college was easier than that in another; that teachers in one college were "smarter" than those in another; that scholars were in one college and plodders in another; that the classes in one college were given preference in classrooms by the registrar; that they made it tough for you in one college if your math work had been taken in another, ad infinitum.

In the teaching ranks it was rumored that some deans were more effective in "fighting for their people" than others; that one would have more secretarial and mimeographing help if he were teaching in one college than in another; that the students were far more intelligent on one side of the campus than on the other. The fact that there was at times considerable truth in these garbled impressions,

which most of us will recognize as being fairly common on most of our campuses, did not help matters very much.

Aware of the increasing demands that would be made of a growing university in a community limited in population and unaccustomed to strong support of higher education, the administration with the full cooperation of the university senate steering committee undertook a thorough study of the situation about 1943 and recommended a revised administrative setup; this was put into effect by the regents in 1945. In essence, this made all subject matter departments, such as English and history, departments of the university, with their chairmen responsible to the dean of faculties. No department was specifically a department of a college, and hence it was possible to combine under a single chairman, for instance, the teaching members of departments offering

courses in every college of the university.

College deans retained specific responsibility for the curriculums of their colleges, the scholarship and educational well-being of their students, and the other ancient and honored aspects of a dean's job that often have been crowded out by the modern tendency to see a college dean as a combination C.P.A. and a "time and motion" expert. College deans, working with curriculum committees, were authorized to make demands on departments for appropriate courses to implement their programs, and matters of manpower were cleared through the dean of faculties.

These, together with other appropriate changes that any academic man will recognize as basic, were attended by some difficulty. Because they were strongly supported by the faculty as well as the administration, however, they were made to work. The system





Many subjects besides chemistry are taught in lecture rooms that supplement modern laboratories of this building.

has been working, as stated, for a number of years and with obviously substantial savings.

As intimated at the outset of this article, not everybody is in favor of the plan. (Some of the members of the Western College Association accreditation team that visited us in 1954 were openly skeptical of its merits and pointed out obvious and real dangers in it.) But there seem to be enough possibilities to warrant consideration by medium sized universities in desperate need of cutting administrative costs. The more important points for and against may perhaps be summarized as follows.

#### AGAINST:

1. It takes away some of the close relationship between professor and college dean, and lessens "college" loyalty within the university engendered by the older system—though this isn't all bad!

2. It obviously functions best in a comparatively small university—we would guess, 4000 to 8000 students. It would seem doubtful that the centralized loads could be carried adequately with a faculty running more than 600 or 700.

3. It imposes an inordinately heavy load of work on the dean of faculties, and at times puts him in the unenviable position of being loved by nobody at all.

4. If unrestrained by intelligent and moderating wisdom, it can deprive the academic dean of too much responsibility in matters of public responsibility and matters of general import, such as selection of faculty.

#### IN FAVOR:

1. Most important is the increase of administrative efficiency. It prevents to a large extent the disastrously expensive competition between colleges in building up "strong" departments,

often beyond the needs of the individual college. (This lessening of competition could conceivably be a bad thing, academically.)

2. It strengthens generally the teaching of the university, making the top professors in any given department available to all colleges.

3. It increases vastly the internal flexibility of the faculty; seasonal or unpredictable migrations of any sort from one college to another pose few problems from the point of view of teaching load.

4. It makes it possible for the dean of the college to keep in touch with his primary job—teaching and students.

Regardless of the over-all merits of the plan, it is suggested that some aspects of it may be stimulating as a fruitful conversation piece among university administrators, as they more and more face the vexing problems of mass education.



## Why Shouldn't We Finance Careers As We Do Houses?

SYDNEY M. ROTH

Roth Brothers & Company  
Chicago

AT A TIME WHEN OUR COUNTRY faces an unprecedented demand for highly trained technicians, engineers, teachers and scientists, it is alarming to contemplate the number of qualified high school graduates who do not go to college. In a recent issue of *Life* magazine, President James R. Killian Jr. of Massachusetts Institute of Technology sums up this situation. He says that of the top one-third (about 300,000) of our high school graduates, only one-third go on to get college degrees; one-third apparently do not want to go; one-third cannot afford to go.

### EXPANSION A PROBLEM

Concurrently, it is hardly possible to pick up a newspaper or serious periodical without reading about the plight of our colleges and universities. As everyone in or close to the education field knows, the larger institutions are pressed to the limit with more applications than they can accept. They cannot erect buildings, expand facilities, obtain sufficient high quality teachers to meet the demands of oncoming waves of students. Smaller schools, if not actually at wit's end to raise sufficient funds to keep their doors open, have problems of expansion on a lesser scale. "Will the Colleges Blow Their Tops?" asks Peter Drucker in the title of an article on this subject in *Harper's* magazine.

In view of this crisis, some administrators ask quite logically, "Why worry about the students who do not go to college when we cannot take care of the ones already at our doors?" I believe, however, that we should worry about it, if by worry we mean that kind of serious thinking that leads to action on behalf of our most capable young people. As President Killian points out: "The nation cannot afford for them not to afford or want to go [to college]."

As far back as 1950 I formulated a plan calculated to solve at least one phase of this problem, namely, the dilemma of the superior student who gives up advanced training because he cannot afford it. By 1953 I had my ideas sufficiently organized to put on paper. A first draft passed through the hands of several friends and persons in positions of authority in finance and education. They encouraged me to go on. In June of 1956, under the title "Why Not Finance Careers As We Do Homes?" a résumé of my plan was mailed to a selected list of several hundred leaders in business, education and industry. A short letter was included, asking for comments.

The response to this mailing was unexpectedly large. Many commented, at length, showing thoughtful study of the plan, pointing out advantages and disadvantages in detail, sending names of other persons who ought to

see it. The majority commended the project, and many of them expressed the hope that it could be put into operation.

As a businessman, it appeals to me to state the problem in this way: There is a \$3 billion market for income producing property (an edifice of education for the individual) which costs each purchaser thousands of dollars but is available to him only if he can pay all or a very large part of its heavy cost in cash *in advance of its use*, or else rely on private philanthropy or government. This eliminates a tremendous third source of potential funds, namely, investment capital for credit purposes. These funds exist abundantly in America today, but they are used for financing such things as automobiles, homes and home appliances.

### TIME BRINGS CHANGES

In the early part of the century it was unthinkable for a banker to lend money for consumer purchases. Yet social needs brought the necessary financial institutions into existence and helped them grow. Today these lending institutions are operating successfully throughout the length and breadth of the land. By not requiring full payment *in advance of use*, this method of financing has raised our standard of living, stimulated the growth of great industries, and provided a large

**This business executive asks:  
Couldn't private investment  
capital be employed to finance  
a college course for qualified  
students, their later earning  
power supplying the collateral?**



market for investment capital with adequate returns.

A good college education, according to authoritative figures, adds an average of \$100,000 to lifetime earnings. The nature of the collateral is the only real difference between financing of college students' purchases of higher education and the present highly successful financing of home loans. A property having sufficient earning power to be worth \$100,000 should be considered adequate collateral for a loan of the full cost of a college or university course including advanced degrees, if such are desired. It should, by application of free enterprise approaches, be worthy of attracting investment capital for the financing of student purchases of higher education.

#### **CONSIDERABLE RISK**

Admittedly, in any individual case the risk might be considerable. The same is true of any standard type of loan. As in the latter, however, the risk of education loans can be spread over many thousands of student borrowers attending colleges and universities all over the country, preparing for all types of high income occupations. The record of repayment of efficiently operated student loan funds of philanthropic origin now in existence is remarkable in its very low percentage of losses. In the greatest free enterprise economy in the world, however,

it does not seem a healthy trend for students to look to government or philanthropy to provide them with higher education free rather than shouldering the responsibility themselves. If large numbers of them have felt encouraged in this attitude, it is about time we made some effort to change the climate of opinion among them.

A change will have to be effected also in traditional thinking on the part of the public so that private and institutional investment capital will be made available to finance the purchase of higher education by all qualified students as such financing is now available on long terms for homes or other income producing property. Requisite corporate or other vehicles to attract investment capital into the education field for loans to students must be established. Once human earning power is accepted as sound collateral and appropriate structures are established, the tremendous student loan market could attract huge amounts of investment capital.

With this additional money in the education field, colleges that now divert money from their general funds for scholarships (grants-in-aid) would have far less need to do so. Funds now given to the colleges for scholarships could be directed to building, maintenance and teachers' salaries. Furthermore, there would be thousands of new

"customers" who could afford to pay for the "product," thus providing a healthier, stronger education "market."

The plan would be based on adequate, readily available, long-term financing. Life insurance, current interest payment, adult co-signers, periodic reductions in principal, and other features could be patterned after sound, established financing principles, those that have been proved successful by student loan organizations set up by philanthropy on a self-perpetuating basis. American business, which established the sales finance companies in direct opposition to the thinking of that time, can again depart from traditional thinking to meet the problem of financing the purchase of higher education.

#### **NEED FINANCIAL STRUCTURE**

To attract the capital required for these loans, it is necessary to have a financial structure within which to function. This structure could be organized within the framework of a profit or not-for-profit organization, but, in either event, the principal funds would come from private or institutional capital (seeking investment at reasonable yields) through the sale of the organization's own obligations secured by the loans. Such an organization would have an appropriate name, such as "Human Earning Power Loan Corporation," "The Educational





Investment Trust," or "The Education Loan Association."

One possibility would be to set up a student loan corporation with its operations patterned in certain ways after those current in the home mortgage loan field and, to an extent, in the sales finance company field. The corporation could be set up as an independent organization, or the colleges and universities could participate in its establishment. In either case the schools could have an active part in the functions of the corporation by contacting the students and servicing the loans, at least while the student is attending school. The educational institutions could derive nominal income for these loan service functions.

Government insurance that would be a counterpart of F.H.A. insured loans in the housing field might be made available for these loans. With such insurance the market for these obligations could include pension funds, endowments and other investors. As the plan matures, a variation may take on some of the aspects of a savings and loan association with insurance against loss similar to that supplied by the Federal Savings and Loan Insurance Corporation. Parents interested in saving for their children's education would be both savers and investors in the organization.

Under the ideal situation, students would be financed in accordance with their full needs on a long-term basis. In determining a student's qualifications, his potential in the chosen field,

the need for his services in that field, and his projected ability to repay the loan from his income over the required period would be evaluated. The amount of tuition and other money needed by the student would be examined in the light of what can be provided by the student, his family, and other sources. Repayment would begin when he begins to earn.

Much of the money in student loan funds offered by colleges and universities is only *seemingly available*. The very miscellany of the funds, each with its own particular restrictions, also tends to obscure them for the student.

Consequently, student loans today are in a primitive state. It is as if each of hundreds of automobile dealers had his own finance plan, some lending 10 per cent of the purchase price, others 20 per cent, and so on, and as if the terms and conditions were equally variable. One can well imagine the chaos that would exist in automobile financing under such conditions. But, difficult as it is to believe, that is the situation today in the student loan field. The students' willingness to assume responsibility for financing their education through loans can be greatly stimulated if nationwide, well publicized student loans with uniform rates and satisfactory terms and conditions are made available.

The huge amounts of money that private and institutional investment capital could provide for student loans under this plan would be a consider-

able factor in meeting the financing needs of higher education. Therefore, foundations and others interested in solving this national problem have an impelling opportunity to help. One way would be by supplying equity capital to lending institutions organized on a not-for-profit basis. The more equity capital the lending institutions have, of course, the more investment capital they can attract for student loan purposes.

There is another area of opportunity for foundations and others. They could help bring into existence agencies (or extend the functions of existing agencies) that would have the following major objectives: to help establish the lending institutions, to encourage investment capital to enter the education field, to create a climate of opinion in which students would willingly assume a share of financing their education through loans, and to lay the groundwork for legislation to provide government insurance for the loans.

Such agencies could perform many functions. Among them would be legal and loan procedure counseling, public relations, field service representation, studies on operating procedures for the functioning institutions, and all else necessary to the success of this approach.

In this country we cannot force superior high school graduates into higher education, but by administering adequate, businesslike loans on a national basis to those who lack funds, we can greatly reduce the number who are lost to careers for which they are best fitted. I believe action in this direction by foundations, corporations and others interested in the problem would benefit the entire nation.



SINCE THE END OF WORLD WAR II, there has been an increasing realization of the need to establish a definite policy regarding the retention and disposal of records on the part of government, business and institutions. Further impetus for examining this problem was given when the Hoover Commission report revealed the savings possible if its recommendations were carried out. This report stated:

"This study gives ample proof of the fact that record making and record keeping are the greatest consumers of salaries, space and equipment of all the housekeeping or service activities of the federal government."

Today, management is trying to reduce the paper work problem by exercising birth control. The most useful tool for this purpose is the wastebasket.

What factors should be considered in establishing a retention schedule for accounting records? One is the legal requirement. The tax laws of the federal, state and local governments, as well as the requirements of government agencies, must be considered in establishing a policy. In some cases practical considerations may necessitate keeping records longer than the legal minimum. Each institution should examine its own files and study its own needs to arrive at a schedule for the retention and disposal of its records.

#### **MUST TAKE RISK**

The frequency of reference to items filed is another factor. It is important here to weigh the cost of an occasional lawsuit against the cost of retaining records for a long period. Management must take a calculated risk in deciding to destroy rather than to retain records for long periods. The experience of comparable organizations also is helpful in setting up a retention schedule.

No specific period is set for preserving W-4 forms (Employers Withholding Exemption Certificates) and information concerning the number of employees subject to tax or amounts and dates of payments.

While educational institutions generally are exempt from filing income tax returns, their employees are required to do so. It would seem wise, therefore, to consider the limitation periods

This is a condensation of an essay submitted by the author in partial fulfillment of the requirements for the degree of master of science, Columbia University School of Business, June 1955.

## **When Is It Proper to Destroy Records?**

**And how shall it be done:  
by burning or shredding  
or selling as wastepaper?**

**FRANCES A. BARRY**

*Assistant Bursar, Barnard College, New York*

of the Internal Revenue Code in establishing retention periods for employee records. This code provides a three-year statute of limitations from the date the return was filed (or due date if filed earlier) for the assessment of taxes or for court action without assessment. The taxpayer usually has three years from the time the return was filed or two years from the date it was paid in which to file a claim for a refund. However, through agreements or extensions or because of exceptions, this period may be extended to as much as 11 years. If no return is filed, or it is a fraudulent one, there is no time limit.

Some of the federal laws that must be considered in establishing a retention program are the Fair Labor Standards Act (wage-hour law), which sets up periods of two to four years after the date of last entry for keeping certain employee records, and the Walsh-Healey Act (public contracts), which is applicable to persons who are parties to a government contract. It requires that contractors subject to the act keep wage and hour records for employees engaged on government contracts for four years. Where it is not possible to segregate those working on such contracts from other employees, then the records must be kept for all employees.

The federal Social Security Act (old-age and survivors benefits) and the federal Unemployment Insurance Act also require that certain information concerning employees and copies of schedules and statements be retained four years.

In addition, the various state laws must be consulted. In New York State, for example, there are the state income tax, franchise tax on corporation, stock transfer tax, and many others. Some cities have a variety of special taxes.

There are also statutes of limitations in the states that set a maximum period for court actions as applied to debts, notes, contracts and other obligations. Records that are subject to subpoena, such as investment records, accounting records, contracts, agreements, leases and similar records, are subject to the statute of limitations not only in the state in which the institution is incorporated but also in the state in which they are executed.

#### **DETERMINING FACTORS**

The nature of the records, the form of statements, and the uses to which they are put are important factors in determining record retention policy. Certain companies are regulated by federal or state commissions which specify the length of time records must be kept, but it is possible to destroy certain types of records, such as time tickets, if the basic data are transcribed to other records. One company kept payroll distribution data from 10 to 20 years because for a long period these records contained information that was not available elsewhere.

Certain types of records have varying requirements for preservation, depending upon the use they serve. For instance, vouchers may have permanent value if they cover capital invest-

ment items, whereas ordinary expense vouchers may need to be kept only three or four years.

Whether a document has present or future value depends upon whether it is a primary source of information or whether it summarizes data from several sources. The institution's own experience would be the principal guide as to future value.

The historical factor must not be overlooked. An organization approaching a milestone, such as its hundredth anniversary, will want information available for the celebrations to mark the event. Special exhibits may be useful in attracting attention and the development of public relations office, particularly, will find such data helpful.

A knowledge of what an institution did under similar circumstances in an earlier era may prove helpful in reaching decisions. Many institutions found this to be true in World War II when they lacked information concerning decisions in World War I and had to rely upon the memories of older employees. It is suggested that samples of forms and records be kept for future reference and for exhibits of the changes that have occurred in record keeping over the years, such as the change from handwritten accounts to machine accounting.

Cost is an important factor in determining whether to keep old records, to store them in low cost storage areas, or to microfilm them. Cost items include not only equipment and floor space but also salaries and overhead. Records designated for permanent preservation should be recorded on paper that will endure.

Frequently used records should be easily accessible in the office. However, low cost storage areas are being developed which are generally provided with telephone service so that material stored there will be available for reference upon request. Space in storage centers costs considerably less than office space. In some areas, cities have established centers where space can be rented.

The National Records Management Council reports that it costs about \$48 a year to maintain the contents of a four-drawer file in an average office. This cost can be reduced to approximately \$4 a year by making use of a records center, and valuable office space is released for other purposes. Equipment and storage costs also can be reduced.

Records designated for permanent

or long-time retention should be kept in a fireproof room or vault.

Microphotography is the process of photographing records at high speed on acetate, safety base film that is approved by the National Bureau of Standards. For ordinary records 16mm. film is used, but the 35mm. film has proved more adaptable for such things as bound ledgers, journals, minute books and blueprints. Recently 70mm. equipment has been developed that is more satisfactory for large engineering drawings. Microfilm readers are available to read the film, and it can be developed on sensitized paper for reference purposes.

Microfilming reduces space and equipment requirements about 99 per cent, and new film can be made from the old so that these records can be retained indefinitely. However, if records are used frequently, microfilming is not always satisfactory since use must be made of a reader. Many institutions are finding microfilming useful in recording current transactions.

Most authorities recommend that records to be microfilmed be kept for six years or longer. The manufacturers of microfilm equipment will assist in inaugurating such a program.

#### USEFUL SUPPLEMENT

It is generally felt that microfilmed records will be acceptable in court provided it can be shown that such records are made in the ordinary course of business and under a planned program. Microfilming is not the substitute for a well developed records management program but is a useful supplement to such a program.

The establishment of a records retention program may be turned over to an outside group such as the National Records Management Council or it may be undertaken by the organization itself. In the latter case, the first step will be the appointment of a committee, including the controller, legal counsel, and representatives of all departments to be covered by the program. An inventory should be made of all records in use, their purpose, and suggested periods of retention.

Next, they will be classified as to their importance to the institution in its operations. The legal requirements and comparable organization practices also will be considered in establishing retention periods. As part of its work, the committee should seek to eliminate useless forms, unnecessary reports, or excess copies. By doing so and practic-

ing so-called "birth control," the mass of material to be considered for retention can be reduced substantially.

It may prove helpful to group records for the purpose of establishing a retention period rather than to try to fix a period for each type of record. Five groupings are suggested: (1) those to be kept permanently; (2) those to be kept from 15 to 20 years; (3) those to be kept six years (statute of limitations in New York State for many records); (4) those to be kept four years; (5) those to be kept less than two years.

Once established, the entire program should be under the supervision of a competent records manager. Otherwise, the value of the entire program may be lost. It is important to see that transfers to low cost storage areas are made as planned and that disposal periods are put into effect. An index card should be kept showing the location of every record so that it can be produced when needed. One of the reasons for establishing such a program is that the great mass of material usually kept makes it impossible to find important documents if an emergency requires them.

There are several methods of disposal—by burning, by shredding, or by sale of wastepaper. The nature of the record will be a factor in determining the method to use, but burning is preferable for any confidential material, and the incinerator chimney should be provided with a screen to prevent the escape of small pieces.

A certificate of record disposal should be made for every record destroyed in accordance with the retention schedule. This certificate should be retained permanently as proof that the records were destroyed in accordance with an established procedure.

Where an institution employs an internal auditor, one of his duties should be to check on the adequacy of the program and whether it is being carried out as planned. In addition, the committee should review the schedule periodically since changes in the business or new legislation could require adjustments.

Before the destruction date arrives, department heads should be informed of the records about to be destroyed so that if there are special reasons why certain material should be retained, this can be done. It is possible that there might be an unsettled tax case or pending lawsuit for which the material might be necessary.

For small privately supported colleges  
here is an easy method of

## ***Accounting for Inter-Fund Transactions***

LEONARD P. VIDGER

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OPERATING FUNDS FOR THE TYPICAL public educational institution are appropriated after budgetary estimates have been submitted and carefully reviewed. In compliance with statutory regulations accurate accounting for appropriated money must be made by type of fund and object of expenditure. Only in special situations may expenditures exceed appropriations authorized by the political body.

Contrast this procedure with the small privately financed college or university that is less formalized and restricted in matters pertaining to finances. Estimated revenues reflected in the budget of the publicly supported educational institution usually are realized because of the relative certainty with which taxes are levied. In the case of most privately controlled institutions, budgeted income is contingent upon various sources. These include income from endowments and investments, profits from commercial enterprises, support from the church or other related constituency, and gifts from private businesses and individuals.

In a milieu of rising costs and expansion outlays required to accommodate increased enrollment, the revenues of many private institutions have not been adequate. The financial plight of many of the smaller institutions has made the practice of internal borrowing from various special funds widespread. These conditions have placed additional burden and responsibility upon administrators. They also have required the accounting or financial officer to provide accurate and current information as to the status of the various funds and the extent of internal borrowing.

What might be considered an ordi-

nary accounting task becomes somewhat more complex and involved in that numerous heterogeneous but interrelated functions exist on the campus of the typical college or university. It is my purpose to outline a method applicable to the smaller privately supported educational institution that will facilitate accounting for numerous inter-fund transactions and automatically reflect the debtor-creditor status of each fund. The method described does away with the usual periodic analysis and adjustments necessary in the absence of an adequate budget.

### **CHARACTER OF TRANSACTIONS**

An examination of the various financial transactions of educational institutions will disclose an imposing array of activities, many of which are subordinate to the primary objective of instruction. For example, in addition to ordinary receipts and expenditures pertaining to maintenance and operation, cash funds are received that are designated to be used for loans to students.

Gifts in the form of cash and property are received involving annuity contracts. Construction projects may be originated for the erection of buildings to be used for instructional purposes. Facilities such as student dormitories, faculty housing units, cafeterias or dining halls, infirmaries, laundries, bookstores, student unions, and snack bars may be acquired or erected. This list should also include farms, income producing properties, and investments in or outright ownership of commercial businesses from which an educational institution may derive income.

A college or university is, in effect, an operating corporation, a commercial credit agency, an investment trust, a

landlord, a real estate agency, an agricultural enterprise, and a custodian or agent.

### **NECESSITY OF FUND ACCOUNTING**

An accounting system for a college or university should be designed to recognize the autonomous nature of the various activities represented. To achieve this objective, a separate fund should be established for each activity.<sup>1</sup> A fund has been defined as: "An accounting entity established for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations."<sup>2</sup>

Representative classes of funds commonly employed by institutions of higher education, with a brief description, are presented in Table 1 on the following page.

It is common for many educational institutions to have several student loan funds, construction funds, plant funds, and agency funds. Where this is the case each bears a title that indicates: the name of the loan fund, nature of the project under construction, type of plant facilities (*e.g.* instructional or auxiliary), or name of the depositor, respectively.

### **ACCOUNTING FOR CASH**

It may be desirable to provide separate cash or bank accounts for many

<sup>1</sup>Russell, John Dale: *The Finance of Higher Education*. Chicago: The University of Chicago Press, 1944, pp. 54-55. See also Lorig, Arthur N.: *Accounting Manual for Small Cities of the State of Washington*. Seattle: Association of Washington Cities, 1945, pp. 4-7.

<sup>2</sup>College and University Business Administration. Washington, D. C.: American Council on Education, 1952, Vol. 1, pp. 139, 140.



of the funds. However, this is not a practical procedure since it requires additional accounting detail, clerical costs, and banking charges. In municipal and governmental accounting, the maintenance of separate bank accounts for each fund has been recognized as unnecessary. Accepted practice merely requires that the records reflect the portion of cash belonging to each fund.<sup>3</sup> This practice also has received widespread acceptance among educational institutions.

Wherever a central cash depository account is used in the absence of appropriation limitations or budgetary controls, there is constant danger of overexpending the cash that pertains to one or several funds. Any cash overdrafts on certain funds that result from secret cash borrowings from other funds are not revealed until periodic adjustments are made.

This occurrence may be intentional or unintentional. If unintentional, then it is imperative that budgetary accounts or other suitable controls be adopted. Where inter-fund borrowing is the only alternative available to the small privately financed educational institution, the extent to which it is practiced must be systematically recorded and the facts accurately and currently reported. Anything short of this may lead to abuse and difficulty, especially when engaged in without proper authorization.

Some courts have held that unauthorized inter-fund borrowing by municipalities is equivalent to diverting the use of cash funds.<sup>4</sup> In the case of colleges and universities, the opinion of the courts might be heeded. During emergencies trustees could, of course, authorize special borrowings.<sup>5</sup>

**TABLE 2—SKELETON CHART OF ACCOUNTS**

Assets	Liabilities
100 Cash on hand	202 Vouchers payable
101 Cash in bank	203 Student advances and deposits
102 Accounts receivable	204 Notes payable
103 Notes receivable	205 Bonds payable
104 Investments	206 Deferred income
Due from:	Due to:
105 Current general fund	205 Current general fund
106 Current restricted fund	206 Current restricted fund
107 Student loan fund	207 Student loan fund
108 Endowment fund	208 Endowment fund
109 Annuity fund	209 Annuity fund
110 Construction fund	210 Construction fund
111 Plant fund	211 Plant fund
112 Agency fund	212 Agency fund
120 Equipment	Equities
121 Building materials	250 Fund principal
122 Buildings	251 Fund balance
123 Land	252 Fund surplus
Revenues	Expenses
303 Interest received	404 Maintenance and repairs
305 Gifts received	405 Salaries and wages
306 Tuition and fees	406 Interest expense

The problem of inter-fund accounting is not limited to cash transactions. Inter-fund borrowings also arise from values of a noncash character. These consist of inter-fund or interdepartmental transactions involving transfers of equipment, materials and supplies, and the rendering of services by one fund for another. They are analogous to cash transactions in their bearing on fund debtor-creditor relationships and should be accorded similar treatment in the accounts.

#### **MULTI-FUND ACCOUNTING**

Few accountants for educational institutions maintain separate books of account for each fund. However, in the nature of the problem, the numerous entities and their close relation-

ship and interaction require the adoption of an expeditious method of recording transactions.

Specific steps can be taken to adapt an existing accounting system to accomplish this objective. The first step is to design one centralized uniform classification of accounts applicable to existing and additional funds. The approach is through a master chart of accounts that will encompass every foreseeable type of transaction that will affect the various funds. Any account required to accommodate similar transactions of more than one fund will appear but once in the chart. For example, some typical accounts used by most funds consist of Cash in Bank, Vouchers Payable, Fund Principal (or Balance), Interest Received, and Interest Expense. Table 2 at the top of the page presents a skeleton chart illustrating accounts common to several funds.

**TABLE 1—CLASS AND DESCRIPTION OF FUNDS**

Designator	Class of Fund	Description of Fund
A	Current General Fund	Assets expendable for maintenance and operational purposes without restriction as to use.
B	Current Restricted Fund	Cash and investments restricted by donors or outside agencies as to use.
C	Student Loan Fund	Revolving loans for assisting students.
D	Endowment Fund	Nonexpendable investments, the income therefrom being designated for specific uses.
E	Annuity Fund	Cash, properties or investments received in accordance with annuity or living trust agreements.
F	Construction Fund	Fund for erection of a particular building or physical project.
G	Plant Fund	Permanent physical facilities of the institution.
H	Agency Fund	Funds for which the educational institution acts in the capacity of custodian.

#### **USE OF FUND DESIGNATORS**

In order to identify those transactions that pertain to a particular fund and also to aid in recording transactions in special journals, a fund designator of either a letter or a numeral

<sup>3</sup>Chatters, Carl H., and Tenner, Irving: *Municipal and Governmental Accounting* (2d ed.) New York: Prentice-Hall, Inc., 1947, p. 237.

<sup>4</sup>*Ibid.*, p. 223.

<sup>5</sup>Frequent borrowing between funds, whether for a short-term or long-term period, is generally discouraged. See College and University Business Administration, *op. cit.*, p. 20.



is assigned to each class of funds. The Current General Fund is identified as "A," Student Loan Fund as "C," Endowment Fund as "D," and so on (Table 1.) When more than one fund within a fund class exists, a suffix letter or numeral can be used to identify each fund. For example, either C101a and C101b, or C1011 and C1012, might designate the account Cash in Bank of two separate student loan funds.

The use of special multicolumnar journals will facilitate the recording of various types of fund transactions. A Cash Receipts Journal, Cash Disbursements Journal, Voucher Register, Student Record, and General Journal will meet the requirements of the smaller institutions. In these special journals separate columns are assigned to those funds having numerous similar transactions, while but one column need be reserved for those funds having little activity. The latter is ruled to permit entry of the fund designator prefixing the account number as well as the amount of the transaction. Those funds employing separate columns are identified by the fund designator as well as the account number in the column heading.

At the end of each month, those journal columns containing various transactions of several of the less active funds are analyzed and summarized by fund on the last journal page. The summarized amounts according to account numbers (prefixed by the fund designator) in the various journals, as well as the totals of those columns reserved for the more active funds, now may be posted to the respective general ledger accounts. Accounts pertaining to each fund should be grouped together in the general ledger under an index tab bearing the designator and name of the fund.

#### PRACTICAL APPLICATIONS

Where numerous transactions occur between funds in the nature of (1) cash loans or transfers, (2) charges for services performed by one fund for another, (3) transfers of property and equipment, (4) consolidation of cash by several funds to acquire an investment, or (5) sundry book adjustments, application of the procedure outlined will facilitate and expedite their recording. Moreover, the balances due from and owing to each fund will be currently maintained.

If we use some of the funds and accounts provided in Tables 1 and 2

and if we assume certain typical transactions, the following examples would be recorded in multicolumnar journals.

1. The cash of the Student Loan Fund has been loaned to the Current General Fund. A student negotiates to borrow a sum of \$50 from the Student Loan Fund. This fund having previously loaned all its cash to the Current General Fund now looks to the latter to make the cash disbursement. The entries as they will appear in the multicolumnar Cash Disbursements Journal follow:

Pertaining to Current General Fund:	
A207 Due to student loan fund.....	\$50
A101 Cash in bank.....	\$50
Pertaining to Student Loan Fund:	
C103 Notes receivable.....	\$50
C105 Due from current general fund.....	\$50

2. The Annuity Fund and Endowment Fund had originally invested an equal amount in real estate first mortgages from which a repayment of \$500 principal and \$30 interest are received. In the event proper authorization has been obtained to take up this money in the Current General Fund as a temporary loan rather than negotiate with a bank for urgently needed cash, the following entries would appear in the Cash Receipts Journal:

Pertaining to Current General Fund:	
A100 Cash on hand.....	\$530
A208 Due to endowment fund.....	\$265
A209 Due to annuity fund.....	265
Pertaining to Endowment Fund:	
D105 Due from current general fund.....	\$265
D104 Investments.....	\$250
D303 Interest received.....	15
Pertaining to Annuity Fund:	
E105 Due from current general fund.....	\$265
E104 Investments.....	\$250
E303 Interest received.....	15

3. A Construction Fund is established for the purpose of erecting a student union building from which building materials are transferred at a cost of \$150 to the Current General Fund to be used in making minor repairs to existing plant facilities. The transaction is recorded on a debtor-creditor basis until cash settlement is made. To record this transfer the following entry would be made in the General Journal:

Pertaining to Current General Fund:	
A404 Maintenance and repairs.....	\$150
A210 Due to construction fund.....	\$150
Pertaining to Construction Fund:	
F105 Due from current general fund.....	\$150
F121 Building materials.....	\$150

4. To further illustrate the flexibility of this system, suppose a dealer in hardware and appliances submits an invoice for the sale of the follow-

ing items: sundry materials for construction of the new student union building, \$350; electric stove for home economics department, \$250, and pipe fittings and plate glass for repairs to buildings, \$35. As a result of consolidating this purchase with one vendor, a substantial discount and freight saving are realized. If the Current General Fund assumes liability for the purchase, a voucher is prepared and recorded in the Voucher Register affecting the following funds and accounts:

Pertaining to Current General Fund:	
A110 Due from construction fund.....	\$350
A111 Due from plant fund.....	250
A404 Maintenance and repairs.....	35
A202 Vouchers payable.....	\$635
Pertaining to Construction Fund:	
F121 Building materials.....	\$350
F205 Due to current general fund.....	\$350
Pertaining to Plant Fund:	
G120 Equipment.....	\$250
G205 Due to current general Fund.....	\$250

#### SUMMARY AND CONCLUSION

With revision of the existing chart of accounts, adoption of fund designators, and re-heading of columns in the various special purpose journals, much can be achieved to facilitate and expedite the accumulation of financial data for each fund entity. This obviates the conventional month-end or year-end examination and analysis of each fund and preparation of adjustments to reflect the current debtor-creditor status of funds. In some cases certain redundant books of original entry and subsidiary records maintained for numerous funds might be eliminated. Moreover, the consolidation, simplification and standardization of one inclusive chart of accounts for all funds will expedite the recording of routine as well as complex transactions.

It should be emphasized that the procedure outlined here is not a substitute for budgeting. It can, however, become a valuable control mechanism in the absence of a budget. If, and when, budgeting is adopted by the institution, this system can be integrated to provide many of the advantages and features claimed.

This accounting technic also may prove useful to various types of government supported institutions. With slight modification, it might well serve the needs of other privately operated eleemosynary institutions such as churches and hospitals which have numerous inter-fund transactions.

**Using Strategic Air Command housing  
as a starting point, Iowa State College develops**

## ***Low-Budget Residence Hall for Women***

**J. C. SCHILLETTER**

*Director of Residence, Iowa State College, Ames*

IOWA STATE COLLEGE HAD TWO PRIMARY goals in building Westgate Hall: (1) speed of construction to take care of the anticipated increase in enrollment of women students, and (2) low cost per bed.

The need for speed was real and furnished the primary reason for the college to turn to this type of residence hall, as 164 beds would be needed in less than a year. The economy achieved in this experimental, nonconventional structure resulted from eliminating refinements and reducing room sizes, including ceiling heights.

Before we built, we inspected several low-cost projects and finally decided on an adaptation of the type of housing that the Strategic Air Command at Offutt Field, near Omaha, Neb., has developed. However, our building differs from the S.A.C. type in both plan and exterior treatment. The Iowa State arrangement also is expected to be more flexible. West-

gate now is being used for women students, but it can serve equally well for men or it could be converted to apartments for married students. It also is a much better arrangement for casual summer visitors than are our conventional halls with central bathrooms.

This building is 171 feet 7 inches by 37 feet 7 inches and is four stories high. The construction consisted of steel frames about 6 feet wide and four stories high, braced at each floor with horizontal beams. These frames were fabricated in the steel shop and trucked to the site, where they were erected on foundations. The floor is of steel planks, spanning from exterior walls to midcorridor. Each plank consists of steel boxes, of which the bottom side forms the ceiling of the room. Certain electric wires were run through these boxes to allow for an electric outlet on the outside wall of each room with the wires concealed. All

other wiring was run on the surface in wire mold.

The exterior walls are precast panels of concrete, with South Dakota pink quartzite being used for aggregate. A special process of fabrication erodes the cement paste between these particles of pink granite, and this produces a rich texture and colors. The slabs are mostly 6½ feet wide by 4 feet high. Those between the windows are about 8½ feet long. They are erected easily by a crane and attached to the steel frame by four bolts being inserted through slotted holes in the steel into inserts cast into the panels. Each room contains three steel casement windows.

Interior partitions are of a material that consists of a sandwich about 1½ inches thick composed of two thin layers of asbestos cement board laminated to a center core of fiberboard. It comes in sheets 4 feet wide and full ceiling height, with spline in the joints. This material does not confine

Westgate Hall, new women's dormitory at Ames, Iowa



Top: A den on each of the upper three floors provides space for relaxing and entertaining. Center: Lobby and desk at main entrance adjoin the lounge. Bottom: Westgate has a spacious lounge which gives note of elegance. A kitchenette is concealed in one corner of the room.

sound as readily as the conventional partition, but it has an extremely hard surface that takes decoration readily.

The floors are concrete covered with asphalt tile. Doors are Philippine mahogany in steel frames.

Heating is forced circulation hot water, with fin-tube radiation continuous along exterior walls.

Capacity of the building is 164 beds. On the first floor are: (1) the house-mother's suite; (2) entrance lobby and main desk; (3) combination lounge and recreation room, 30 by 42 feet; (4) equipment room; (5) trunk storage room, 16 by 15 feet 4 inches; (6) laundry room, 15 feet 4 inches by 9 feet 6 inches, containing three coin-operated washing machines and two steam driers; (7) combination janitor and storage closet, and (8) eight two-room suites housing 32 women. Mail boxes, a large bulletin board, and two telephone booths are installed at the end of the corridor nearest the main desk on the first floor.

The second, third and fourth floors are identical. Each contains one lounge



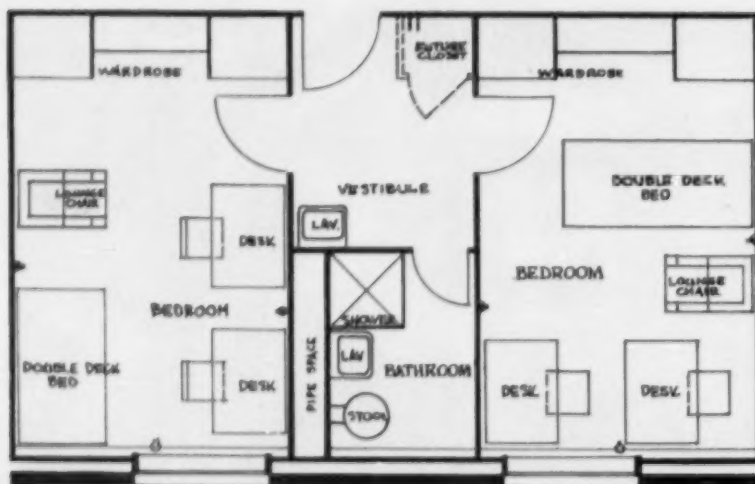


Fig. 1—Typical Suite

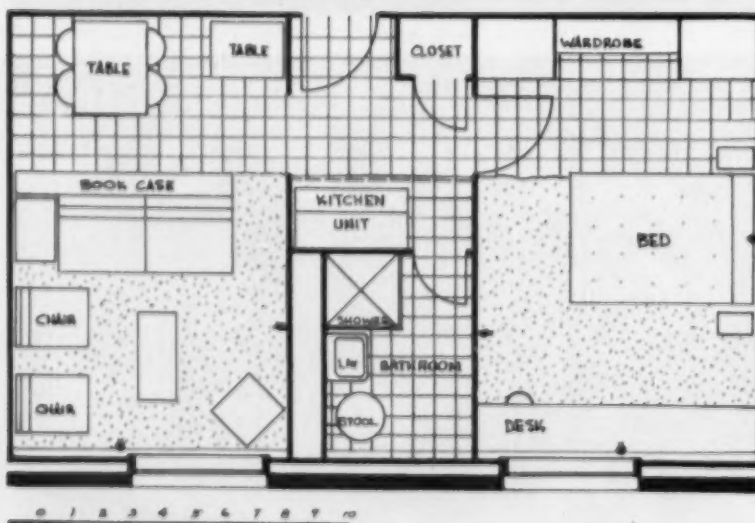


Fig. 2—Apartment Alternate

or den 26 by 20 feet, 22 two-room suites housing 44 women, and a large janitor and storage closet. Each floor has three telephone booths.

Figure 1 shows a typical two-room suite with vestibule and bath between. The furniture can be arranged as shown in the two schemes. Many of the women undocked the beds last fall and found that there was adequate room. Facilities for the storage of clothing consist of two closets containing a shelf and a hanging pole separated by a dresser of wooden shelves behind doors with a high-top and mirror. Matchstick draperies form the closet fronts and have proved to be practical and acceptable by the women occupying the rooms. There are two mirrors over the built-in chests and one over each lavatory. We installed a cross bar attached to the beam in the area marked "future closet" and have found that this adds greatly to the facilities for hanging clothes.

Figure 2 shows what could be done with a suite if we should decide to convert to an apartment.

No facilities are provided for dining; students eat at a residence hall dining room within a short walking distance.

Construction contract (let on a total basis to include plumbing, electrical, millwork, asphalt tile, paint) \$326,608.

Architect's fees.....	\$16,004	
(4.9% of \$326,608)		\$342,612
Physical plant expense		
Utilities, electric service..	\$2,800	
Drives and parking.....	2,000	
Landscaping and walks.	2,000	
		\$ 6,800
Contingencies.....	2,500	
Supervision.....	2,000	
Builder's risk insurance.....	588	
Furnishings: 82 rooms, lounges, housemother's suite and recreation room.....	35,000	
Total cost of project.....	\$389,500	
Cost per cu. ft. \$1.37, cost per sq. ft., \$11.99		

Brooks-Borg, architects-engineers of Des Moines, Iowa, designed the building. James Thompson and Sons, Ames, Iowa, were the contractors. The contract was let on Oct. 29, 1954, and the building was ready for occupancy the following September.

Only use can determine the success of this experiment. Students living in the building have commented that the partitions transmit noise but that it hasn't bothered them too much. No students have complained about the room size, and all of them like the suite arrangement with the bathroom between each two rooms.





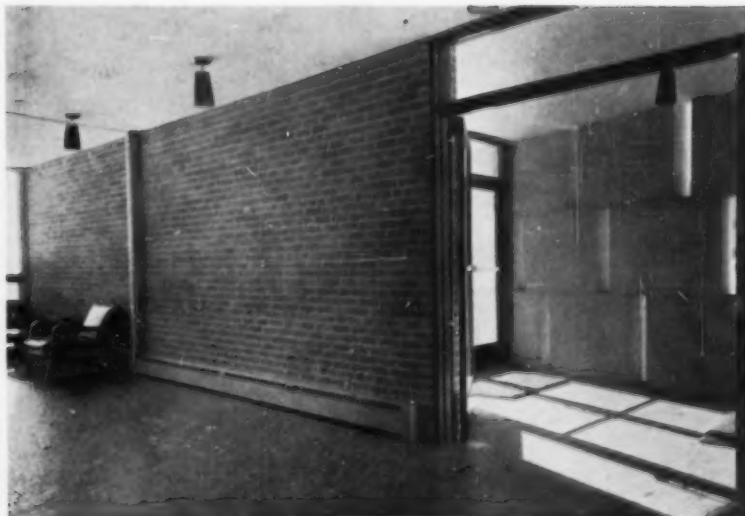
**Standardized plan for floors  
Carefully arranged facilities  
Use of modular principles**

## ***Low-Budget Residence Hall for Men***

**JOHN T. WITHY**

*John Withy and Associates, St. Paul*

Entrance to lobby



THE PROBLEM OF PROVIDING LIVING space for a mushrooming college enrollment with limited funds was presented to Magney, Tusler and Setter, Minneapolis architects and engineers, by Gustavus Adolphus College at St. Peter, in south-central Minnesota.

This assignment was to provide homelike, pleasant living quarters for 200 men students, giving each resident as high a ratio of space as possible. Federal housing funds were available for partial financing, so it also was necessary for the architects to devise a plan that would fit federal requirements for residence hall housing.

Budget limitations were met by adopting a standardized floor plan for the four bedroom floors, by careful

arrangement of facilities, and by utilization of modular principles. By orienting the building to the site—a scenic hillside overlooking a river valley—the architects avoided a barracks atmosphere. More than half the bedrooms and the spacious ground floor lounge face the view.

The building was constructed at a cost of approximately \$2500 per student housed. Study-bedroom space occupies 53½ per cent of the total building, and there is an allowance of about 188 square feet per student resident.

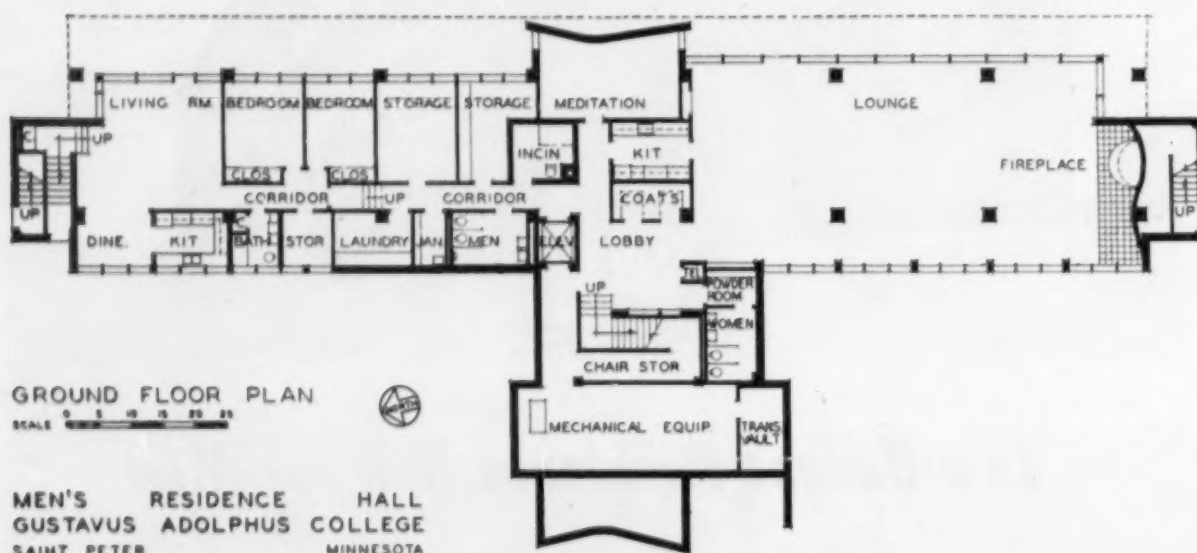
The residence hall, with a ground floor and four stories, contains 100 double study-bedrooms, 25 to each of

the four bedroom floors. Each floor has a centrally located unit containing washrooms, toilets, showers and drying rooms. Placing these units one over the other simplified plumbing and other technical requirements and helped to reduce costs.

Student rooms occupy the first through fourth floors. The 12 by 16 foot rooms have built-in closet, desk and drawer space. Walls are painted plaster (in warm, but subdued tones), and floors are asphalt tile. Bolder color accents are used in corridors and stairwells. Asphalt floor tile is used throughout. Ceilings in public areas are acoustically tiled.

Entrance from the street is to the first floor. A large stairway leads from there to the ground floor lounge. Also on the first floor is a control desk (near the entrance) with an individual buzzer system for each room. Just off the entrance is an area that can be partitioned by folding doors providing private conference rooms for students with their parents or the residence hall head. Direct access to the service elevator is possible from the receiving area, also on this same level.

On the ground floor is a complete private apartment for the residence hall head and his family, storerooms, a meditation room for students, mechan-



Cone-shaped hood suspended over a recessed fire pit dramatizes the spacious ground floor lounge.



ical and service facilities, and the lounge.

The focal point for informal social life is the spacious lounge (it occupies almost half the ground floor) with its large picture windows running the entire length of the room overlooking the valley. Effective use of wood paneling and informal grouping of lounge furniture make it inviting.

Dramatic highlight of the lounge is a fireplace executed in contemporary Scandinavian style. A plastered, cone-shaped hood is suspended over a recessed fire pit, with a serpentine brick wall as a backdrop.

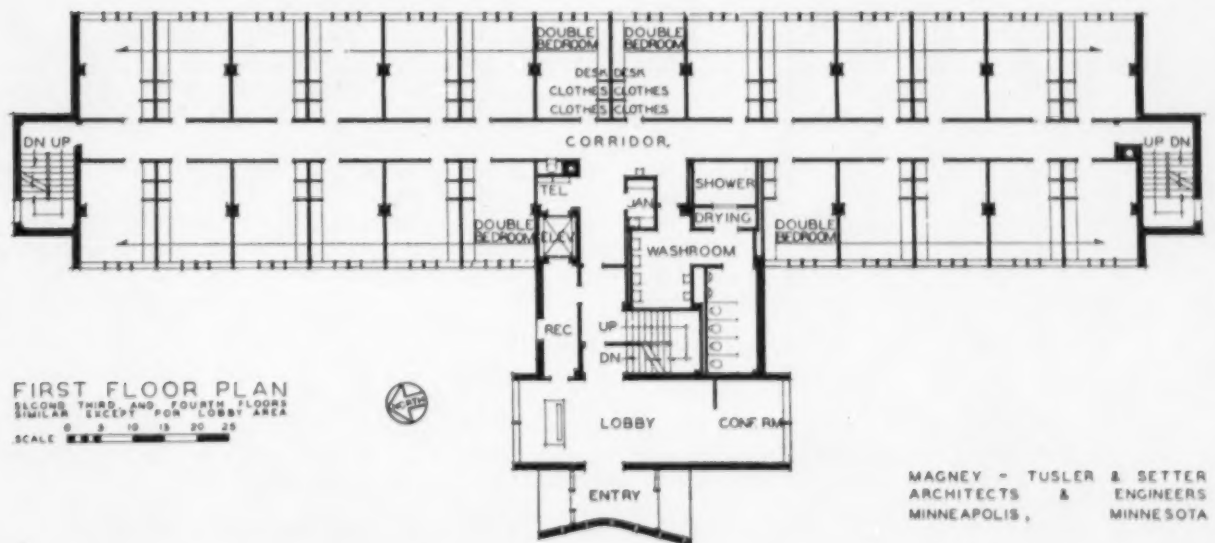
Although the design is simple and

functional (and economical) the architects selected building and decorative materials that contrast both in color and texture. The lobby, for example, is done in brick and ceramic tile. The brick exterior is highlighted by stone trim at the entrance areas and by the long stretches of windows that run the length of the building.

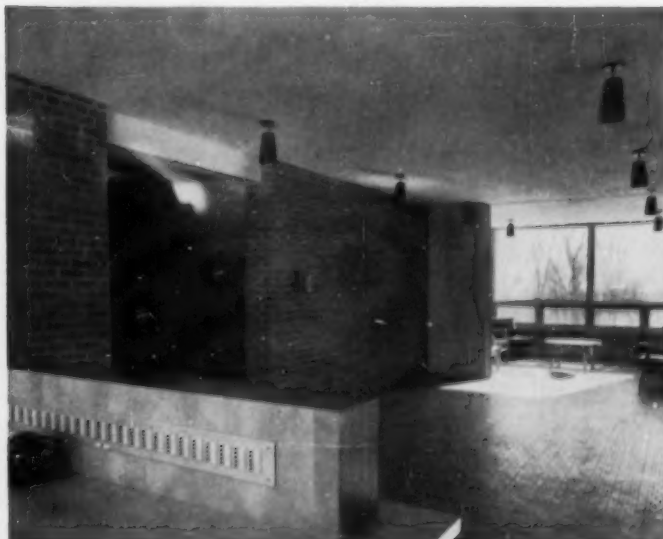
A native Minnesota stone, Kasota stone, also was used for decoration. There are incised carvings on the curved stone wall outside the meditation room. The same stone is used for decorative effect at the entrance; glass slits in an alternating pattern supply the entrance area with light.

Construction is of reinforced concrete. Floors are reinforced concrete slabs, cantilevered from supporting columns so that exterior columns don't interfere with the window scheme or the heating system. Exterior walls are light brown brick; the roof is pitch and gravel.

The heating system is forced hot water, a heat exchanger supplied from the college's central heating plant being used. Fin strip radiation along the outside walls distributes the heat evenly throughout the building. Temperatures are zone-controlled by outdoor thermostats. No provision was made for air-conditioning the building.



Lobby with conference room beyond



Double bedroom



# ACCIDENT PREVENTION

seen through the eyes of a safety enthusiast

can help a university achieve its objectives

**LINCOLN H. LIPPINCOTT**

*Director of Accident Prevention, Yale University*

WITHOUT ADEQUATE FUNDS THE INSTITUTION cannot operate effectively. If funds are wasted from any cause whatsoever, to that extent the objective of the college is interfered with. When we reduce the possibility of accident, when we keep accidents small, when we save money, we are saving money that can be utilized for the basic purposes of the college.

As an illustration, at Yale University in a single fiscal year, through the retrospective rating program of our insurance company and through the reduction of man-days lost through accidents, a net saving of about \$40,000 resulted. This can be translated into so many teachers. If we consider that a good associate professor can be had for \$8000 for an academic year, a saving of \$40,000 makes available to the university five extra men each year to do research or to teach.

If the most pressing need is for physical plant, this \$40,000 saved each year would pay the interest and amortization of a fund of \$800,000 if this money had to be borrowed. This will go quite a ways toward erecting a new laboratory or providing that laboratory with necessary equipment so that an instruction and research job may be effectively done.

## THINK IN TERMS OF INVESTMENTS

The treasurer and financial committee think in terms of investments. Last fall we had an accident that caused the amputation of part of an employee's finger. The total cost for the injury was \$1384; cost of a guard installed after the accident, \$10. Put it another way: investment in a guard, \$10; return on the investment, \$1374.

I am not stressing conservation of assets only in terms of dollars saved. The

big thing that we do is conserve human assets. What would have been the history of the Massachusetts Institute of Technology without Compton or Bush, Harvard without Eliot, Yale without Gibbs, Columbia without Dewey, Chicago without Washburn, or California Institute of Technology without Millikin. Suppose Dr. Fleming had been cut down by an automobile or by some accident in his laboratory before the day he observed a strange material in a purely academic bacteriological problem which he later identified and named penicillin?

In accident prevention, these are the big values that we are protecting. You cannot operate a university effectively without service personnel, but if the man who mows the lawn, or the janitor who cleans the building, or the electrician who installs the new power line is out from illness or injury, it is possible to get another janitor or another electrician to do the same job. But there are indispensable men in the teaching field; there are men who cannot be replaced in the research field.

Whether the subject is Greek or Latin or chemistry or physics, the class belongs to the professor. When we can save the human assets we are serving the objective of the university because it is through these men our universities and colleges do their unique work.

Conservation of human and financial assets is the main product of our accident prevention work.

Instruction is the next great field of university objectives. Here we have a two-way effect of accident prevention. Let us visit a course in Spanish. Here is a man teaching students to read and understand Spanish. In this class there is a young man who has particular aptitude. When he has a full grasp of the Spanish language he may be sent to some South American country. There

he persuades these people to understand more completely the philosophy of the American system. But suppose this student on a holiday takes his car and rams it into a post and lies in coma for a hundred days and never returns to the classroom. There is a great loss to the teacher, to the university, and to the entire country.

The good teacher never expects to receive his full compensation in salary only. He knows he profits most when someone he has taught achieves greatly. His function is the stimulation and enrichment of student minds. When these minds are physically damaged, when the bodies that house them are crippled by an accident, he suffers loss. Let him become aware of the attitudes and habits that are basic to accident prevention, and he will use every opportunity to establish them.

## 1923 IDEA HELPFUL TODAY

President Hadley of Yale in an address to freshmen in 1923 expressed an idea that is helpful today. In substance he said that the colleges exist primarily for the training of American citizens. "We want to train men," he said, "who can govern themselves without much aid from the police. A well trained man has been acquiring in college not a body of facts but a set of habits, and a group of mental powers that go with his habits."

Today we need men who can lead in all fields: languages for understanding other people; history for understanding the past, as a guide to present action; art to add dimension to living; mathematics to obtain control over natural forces.

In every subject are tools for leadership. As we reveal them, the importance of self-discipline is emphasized. Personal appraisal of individual value, awareness that protection is a personal concern, can be stressed in many ways.

From an address presented at the third National Conference on Campus Safety, Massachusetts Institute of Technology, 1956.





- 1. It conserves both human and financial assets.**
- 2. It aids in reaching the objective of all teaching—training citizens.**
- 3. It brings under control the hazards of research work.**

Repetition tends to establish attitudes. Example leads to sound habits of action.

When on every campus we establish these concepts—that the avoidance of unnecessary risk is an indication of intellectual maturity, that chances taken without a sound controlling purpose are the responses of an uneducated mind—we will go far in solving many of our problems. When the proper driving of an automobile becomes the thing to do, when proper crossing of a street is the sign of maturity, when in the laboratory the conduct of an experiment with full recognition of the hazards involved is the mark of the effective student, many of our campus accidents that involve the student body will be on the way to solution.

Accident prevention is an integral part of many courses, business administration, for instance. What business administrator today can avoid the impact of accidents to his employees? They affect public relations, industrial relations, the cost of his product. The man who is building a road or bridge knows that the profit he gets is affected by the damage to equipment and the damage to men when accidents do occur.

Courses in psychology provide basic understanding on which much of our accident prevention work must draw. As we know better how to direct and control motions, as we know how people can be influenced to establish attitudes of mind and habits of action, we can make them safer.

The mechanical engineering student needs to be acquainted with the necessity for instruments that do not tempt men beyond their capacity. He needs to understand the necessity for devices with in-built safety features.

The law student necessarily is concerned with statutes that attempt to eliminate dangers or provide that people who are injured are compensated.

What law student avoids workmen's compensation, public liability laws or automobile insurance, with its current emphasis upon compulsory features? Many of these young men and young women leave the field of law itself to go into legislatures. There they have a part in the enactment of laws that have for their purpose making people safer. One of the stumbling blocks is that so many times these laws are so poorly expressed that the individual does not know exactly what he is supposed to do.

#### **EMPHASIS ON PREVENTION**

Many fields of study that were little concerned with prevention now make it one of their specific activities. Medical study formerly involved curing diseases and correcting bodily defects. Now the emphasis is increasingly on prevention. As we come to understand more about the functions of the body; we are in a much better way to conduct ourselves so that these functions will not be impaired by accidents.

Surely accident prevention is an aid in reaching the objective of all teaching.

Diligent search for truth is the cornerstone of university research. Out of the discoveries come not only material for teaching but direct benefits for daily living. Equipment, but particularly the skill and devotion of the scientists and technicians, is essential to progress. Prevention relates to both.

In one of Yale's laboratories it was found that distilled ethyl ether was a most effective extracting agent in preparing blood samples for accurate radiation tests. At first 2000 cc.'s were used. Then as procedures were established, more and more ether was required until weekly use totaled 50 gallons. Because doctors were intent on the purpose of the study, the low flash point, wide explosive range, health

hazards were overlooked. Applied accident prevention brought these hazards under control before any catastrophe occurred.

Inserting glass pipettes into stoppers is a common problem in most laboratories. Where chemicals, viruses or bacteria are involved, even a small cut may result in long absence from work. Inexpensive rubber holders and minor changes in procedure serve to reduce the possibility of these injuries. Research is promoted when scientists and technicians are conserved for their essential function.

The research expert is intent on his main problem and fully aware of the great hazards involved. This very concentration makes him overlook the common dangers. He can handle nuclear radiation but he drops a heavy power strut and smashes his toe. He jumps from a tilting box and injures his ankle. Sometimes every precaution is taken with high voltage and radiation, and death results from contact with 120 volts of a simple lighting circuit.

Various problems of accident prevention are worthy subjects for research. Substitutes for many dangerous materials have come and will come from our laboratories. Methods of operation need the careful scrutiny of the scientific mind under controlled conditions. As we increase our knowledge of human functions and limitations, we shall reduce the waste and suffering from personal injury.

For those of us who are charged with the responsibility for campus safety there is a special value when we have as clear an understanding of the purposes of our institutions as we have of our own work. We do our best only when we believe that doing our best matters greatly. We have an important part in this work of enriching and stimulating the minds of potential leaders.

# **Residence Hall Morale**

## **depends on good internal communication**

**D. T. PERSOL and R. H. HARDING**

*Industrial Communication Staff, Purdue University, Lafayette, Ind.*

SHOULD ONE ENTER A BUSY OFFICE filled with people working diligently at their desks on various projects and there observe an administrator coping with problems of coordination, planning and communications, one might suppose he was at the nerve center of a well known corporation. However, he could just as easily be in the busy office of the director in charge of residence halls at a major university.

When industries were small, employing no more than two or three hundred people, it was possible for "the boss" to know his workers and personally to transmit to them his projects, ideas and enthusiasm. But as companies grew into giants there came to be less and less personal contact between "big brass" and the workers, and this frequently resulted in breakdowns in understanding, respect and loyalty.

In many ways, operating difficulties in the nation's collegiate residence hall programs parallel the growth problems encountered by industry. Twenty years ago the residence hall manager might have had one or two hundred students under his supervision. It was not impossible to keep in contact with their problems and their opinions, and thus to provide them with the most essential services possible, according to available income.

Today residence hall programs are expanding rapidly, and now one finds the directors attempting to keep in touch with from three to five thousand students through staff personnel. That is why effective communication is one of the key problems facing residence hall management today. Fortunately, earlier industrial experience has directed attention to this fact and a large number of breakdowns and embarrassing situations can be avoided if this industrial experience is not ignored.

The successful operation of modern university residence halls depends on

the cooperation of residents in these halls with the managing staffs. This factor is important if maximum services are to be rendered to the residents at minimum cost. Unless residents *understand* and appreciate the problems faced by the personnel operating their housing units, and unless they *trust* and *respect* the members of this group, management of such units can be very unpleasant as well as extremely inefficient. So it is simply good business to gain the cooperation of the purchasers of services offered by university housing projects. It is our contention that *effective internal communications* are absolutely essential for "good business" in university residence halls.

The question naturally arises: How are effective communications to be established? There is no single answer to this question. Communication research and day-to-day practice are showing that certain technics will work under some conditions, but there is no known panacea to cure all communication ills.

The problems differ from one university to another just as from industry to industry, because of such widely divergent conditions as objectives, budgets and human personalities. Nevertheless, it is possible that this case study of administration in the men's residence halls at Purdue University (with a combined capacity in these halls of more than 3000 students) will be helpful to the management of similar institutions.

### **STRUCTURE**

It may be well to outline the appropriate administrative structures in order to introduce a number of terms that probably are not used in the same sense in other institutions.

All Purdue men's residences are under the supervision of a director,

whose immediate superior is the business manager of the university. Three managers have complete responsibility under the director, for their respective residence units, and three departments—administrative, maintenance, and foods and housekeeping—operate under the supervision of each manager. By far the largest portion of the administrative department consists of a number of single men who live with the residents in the halls; these are referred to collectively as the counseling staff, and are assigned individually to one of two levels of responsibility.

One faculty sponsor is appointed for approximately every 200 residents; he is a half-time employee and a member of the university staff or a graduate student. One counselor is hired for approximately every 50 residents; he is a quarter-time employee and may be a graduate student or an exceptionally well qualified undergraduate. Faculty sponsors are the immediate superiors of three or four counselors. Although there is no direct administrative connection between the office of the dean of men and the residence halls, the closest cooperation is maintained between these functions and one freely and frequently helps the other in the solution of serious student problems.

### **PRACTICE**

Communication practices now in use at Purdue may be classified as either direct or indirect technics. The former could be named "administrative" and the latter "spontaneous" or "student-to-student" communication; by no means should the effectiveness of the latter be ignored by the progressive residence hall staff. Common industrial terminology, in line with company structural diagrams, would probably call the technics "vertical" and "horizontal" communication, respectively; however, as will be seen, student-to-



"Communication is, in a sense, synonymous with human relations, since all personal relationships are developed through some form of communication. It is through our communications programs, therefore, that we must work to develop the positive attitudes, the loyalties, the respect for management, and the teamwork that is so essential for profitable operation."—Quoted from a statement by General Electric Corp.

student communication includes a good deal of vertical transmission also.

The industrial nomenclature does offer an opportunity to categorize (and hence to understand) administrative communication as "line" or "staff," depending on whether information is passed on by someone in direct authority over the receivers or by someone in an advisory capacity only. But regardless of the names used, the aim of these forms of communication is the same: achieving mutual trust and understanding in order that the resident may enjoy a maximum return on his investment and may contribute a maximum toward group harmony.

#### HANDBOOK AND BULLETINS

Each resident is given a copy of the official handbook to make him aware of his privileges and responsibilities as a member of a living unit. This book, revised every few years through the cooperative effort of management and student governing bodies (the book may thus be classified as "line" communication), attempts to explain the "whys" as well as the "do's and don'ts" necessary for the form of community life existing in this type of housing.

Sections are included in this 40 page booklet on the history of the men's residence halls, on the duties and structure of the student government organization, and on etiquette. Thus, a preliminary attempt is made to develop in the student a sense of pride in his living unit. However, oral communication supplements this written medium: All the important sections of the handbook are later discussed with new students in scheduled meetings; officers of the student government and members of the counseling staff act as discussion leaders.

A certain additional amount of printed material is circulated during the course of the year; bulletins are

used to keep the residents informed on matters important to the entire group. Such written communications are used as supplements to oral explanations and announcements presented by student leaders and counselors, and not as substitutes. Every effort is made to prevent duplication in written material and, in general, to minimize the quantity of such material (to avoid the development of indifference toward it on the part of the residents). These "line" bulletin board contacts probably are the least effective method used in influencing group thought. They are used only because it is necessary that basic policies be spelled out in writing and because, in spite of their inefficiency, they provide a rapid "shotgun" technic for disseminating information.

Purdue is fortunate to have a student operated radio network solely within the residence halls. Since student government notices are broadcast in addition to music, a horizontal line of communication develops between students that offers considerable advantage in that it is a highly personalized communication medium.

#### STUDENT GOVERNMENT

The promotion of an active and responsible student organization can save a manager countless headaches and problems. Here is where *two-way* communication really can help develop positive attitudes and mutual respect. Management policy can be explained, together with the reasoning behind it, in a face-to-face situation. Likewise, student opinions and constructive criticism can be brought to the attention of the manager. This vertical communication is paralleled in lower echelons of student government with members of the counseling staff who, in this particular capacity, occupy "staff" positions only.

A good student government can

serve the same purpose as an honest company union; somewhat like the union that works for the laborer, student government may work in the best interest of the residents and thus, incidentally, of management. Mutual trust on the part of both management and the student organization results in a high morale group with strong feelings of security and well-being, and, if this group is provided with a moderate amount of straight-from-the-shoulder facts with which to work, it will be likely to induce other residents to accept its views. This is the sort of spontaneous communication for which residence hall staffs should strive.

If a residence hall executive cannot or does not take advantage of this form of communication—if he fails to promote his internal student government and to feel and regulate the pulse of student opinion through this group—he has ignored a splendid opportunity. What is more, his failure to establish personal relations with a group of responsible students may categorize him as an "ivory tower" executive who has little opportunity to regulate through trust or respect. And distrust or lack of respect lead only to low student morale with its increased administrative headaches.

The student government leaders of Purdue's men's residences are elected annually by the residents over whom they hold their authority; thus their communications with the resident body probably are best classified, in the terms used previously, as horizontal-within-vertical.

Originally the student governments were concerned only with social and athletic programs for their groups, but as they developed greater poise and maturity they assumed responsibility for handling internal discipline problems and began to act as spokesmen for their groups in campus activities. Through the years they have developed pride in their traditions and in the accomplishments of their predecessors. Without effective student-to-student communication and positive administrative support this would never have come about. But because it was felt that a student would be happier in a unit of which he could be proud, and that thus he would be a better resident from management's point of view, every possible form of communication was explored to help the student help himself.

It must be recognized that many residents won't read the available



printed material and that some, for one reason or another, always fail to attend the scheduled meetings. It sometimes happens that the lower ranks of student governing bodies haven't been made fully aware of—or aren't capable of carrying out their part in—the problems involved in the operation of the residence halls, and are thus examples of failure of mass communication technics. Reference to industry once again will provide valuable information.

#### CHAIN OF COMMAND

If a corporation president desires to transmit a plan he generally cannot speak individually with each person on the production line. Vice presidents, superintendents, division heads, and foremen are all part of the chain of command that transmits the idea to the workers. In the final analysis, however, it is the first-line supervisor who is company management to labor; the respect and trust that the workers have in him usually are representative of the feeling they have for the rest of management. The foreman's ability to deal successfully with his men and, of course, his knowledge of the goals for which he is to strive and the means by which he is to reach them determine the degree of acceptance and understanding of company policy held by the workers.

In residence hall administration the counselor is the member of the staff nearest the students. He is the management representative with whom the students not only work but live, and in this situation of constant observation he must gain their trust and respect and must himself "live" the objectives of his employer. Here is a complex communication problem involving all of the listed types. As in the case of the worker and foreman in industry, the attitude the students have toward their counselor usually determines their attitude toward residence hall management.

At Purdue, faculty sponsors and counselors are selected carefully and then trained since they deal with morale and discipline factors in their areas, giving special attention to helping new students make personal adjustments to a new mode of life. A favorite comment of J. C. Smalley, director of men's residences, is: "An empty counselor room can't hurt the halls, but a poor counselor can harm the entire organization."

Counselor training is another example of vertical communication. Coun-

selsors come from widely varied backgrounds and most of them have no intention of becoming professional counselors; yet their conduct and even their opinions must reflect a consistent residence hall policy. If they are to be expected to help the students with their problems and also to explain operating procedures to them, they must understand and freely accept the over-all residence hall philosophy of their managers. To this end a three-day, full-time school is held for them each year, monthly dinner meetings are held for the discussion of current operating problems, and the manager has weekly staff meetings with the faculty spon-



sors who, in turn, have informal daily conferences with their counselors as well as regularly scheduled meetings at least once each week. In this manner a fairly high degree of administrative uniformity is maintained. Counselors and faculty sponsors are able to explain administrative actions authoritatively to small groups of men with whom they are well acquainted.

#### SERVICE STAFFS

Another administrative situation exists in which residence hall employees actually are foremen over about 10 per cent of the residents: These residents are the students employed part time as waiters. Tactful handling of these employee-residents by the foods supervisors in such a "line" communication arrangement leads the students to an appreciation of the operating problems of this department. These residents, in turn, carry a significant influence with their fellows through spontaneous communications. This group is an impor-

tant consideration in the attitude of the residents toward their food. However, it is important to point out that the waiters may affect student attitudes generally: Fair treatment in this aspect of residence hall life will induce them, and others through them, to assume that they receive fair treatment in the other aspects also.

Industrial workers actually come in contact with groups other than their foremen. These are the control engineers and inspectors who have no direct authority and, accordingly, are designated as staff people.

Staff communications are established in residence halls by the maids and maintenance men. These people, by the nature of their jobs, have daily personal contacts with the residents. The manner in which they perform their duties and the attitude that they have toward the students have a definite bearing on the morale of the residents in their areas. The communicative attitudes of these people should be developed as favorably as possible.

#### CONCLUSION

The rapid and continuing expansion of university housing has brought about a number of problems, many of which can be traced to a removal of management from direct contact with the residents. To bridge the gaps caused in this fashion effective, multiple-channeled communications are essential. The management of the Purdue University men's residences is attempting to personalize its communications as much as possible and to capitalize on all available channels (involving printed material, student government, counseling staff, service staffs) in order to develop higher degrees of internal respect and harmony.

It may be appropriate to conclude this article with a quotation from communication-conscious industry. Paul E. Hensel, vice president of personnel of the Central Soya Company, points out that:

*"Communication is not merely the transmission of a written or spoken message through the medium of typewriter or vocal cords. In its finest sense, communication is the achievement of understanding among all people. It must be considered the art of successfully passing ideas to another individual vividly, accurately and pleasingly. Effective communication provides a cohesive force which is so vitally necessary in achieving a concerted, coordinated effort in an enterprise."*



MOST INSTITUTIONS OF HIGHER EDUCATION have been sufficiently alerted to the problem that will confront them in a few short years when the enrollment predictions are expected to become a reality. Yet little has been done to gear the various administrative units in most institutions to meet this challenge.

Governing boards and presidents must start to think in terms of the most efficient and effective administrative organization so that the enrollment challenge can be resolved at maximum efficiency at minimum cost. Individuals charged with placement responsibility are concerned with this type of study and are interested in having a part in over-all planning. Most decisions made during this period will have a far-reaching effect on placement.

Although placement services were formerly considered a minor administrative function, they are rapidly being recognized as important in the development of an institution. Evidence of this recognition is found in larger budgets, improved facilities, and increased personnel for placement services. This new status, now recognized by top administrators, has created new demands and responsibilities for placement, and placement people are aware of the need for reorganization to develop improved services.

#### **ORGANIZE ON CENTRALIZED BASIS**

As a result of this reexamination, many institutions have consolidated their placement services and now are organized on a centralized basis. This organization has obvious advantages for the institution, the student, and the employer, and provides as well a wonderful opportunity to interest and utilize faculty in placement activities. Opportunities for this mutual cooperation are numerous and should be encouraged if adequate and satisfactory placement services are to be provided. Fortunately, most faculty members are interested in participating and are willing to offer their services in many capacities.

Placement services, particularly those in institutions that have changed from single to multiple purpose, are or will be reorganizing into a placement center. As these changes are made, placement people will find that not only will there be organizational problems to solve, but also the idea of a place-

## ***Bringing the Faculty Into the Placement Act***

**ROBERT F. MENKE**

*Director of Placement and Professor of Education  
Arizona State College, Tempe*

The placement center helps place postdegree alumni and degree candidates seeking commercial, industrial, governmental and educational positions.



*Syracuse University Photograph*

**Is it not time to reorganize scattered placement services in individual schools, departments and colleges into a placement center? Then we can utilize the faculty in fitting employers and graduates together.**



Wittenberg College Photograph

The placement center is committed to helping nondegree students who are leaving school for work to find jobs, and to help undergraduate students get part-time jobs on and off campus in order to continue their education.

cent center will have to be sold to the administration, faculty and employer. This is especially evident in multiple purpose institutions, where individual placement services have developed in individual colleges, schools or departments. The best selling point for the placement center is that of faculty utilization in placement activities.

#### TWO MAIN PURPOSES

Opportunities for this utilization of faculty are numerous and the results are gratifying. However, before an over-all organization can be established, several questions must be resolved. First come general objectives. Basically, there are two main purposes of placement services: (1) to assist undergraduates and graduates obtain employment according to their training, ability and experience, and (2) to service the community, state and nation with adequately trained personnel.

With these in mind, the next step is to determine how the objectives can be accomplished. Again the basic elements are: (1) to provide general and specific vocational information regarding opportunities in the various fields; (2) to provide honest, authentic and confidential personal records which support the job application; (3) to

provide the candidate with information concerning methods and technics that will be helpful in obtaining employment; (4) to provide the candidate for the employer and the employer for the candidate, both on and off campus, and (5) to provide follow-up services to candidate, institution and employer.

Under this type of organization the placement center is committed to helping place postdegree alumni as well as degree candidates seeking commercial, industrial, governmental and educational positions. The center also is committed to helping nondegree students who are leaving school for work to find jobs, and, finally, to help undergraduate students get part-time jobs on and off campus in order to continue their education.

#### UTILIZE FACULTY

The director or coordinator of this centralized and coordinated organization would provide the necessary leadership for efficient and effective placements. The placement service would be concerned primarily with utilizing the faculty; it would be responsible to the over-all administrator of the academic program and through him to the president of the institution.

With this as the foundation of the placement program, the director or co-

ordinator would contact the various deans with the proposition that each dean, or someone he specifically delegates to act as his representative, serve as an adviser and coordinator between his college and the placement center. This would (1) help develop additional placement contacts for the various institutional areas; (2) furnish the placement center with a contact with staff members of the college in such areas as follow-up; (3) furnish the departments, schools or colleges with information about general placement opportunities available; (4) help sell the services of the placement center to the students, faculty, employer and community, and (5) advance other proposals for improvement of the placement service.

It is suggested that these faculty members have released time for their work with the placement center, and that they work closely with placement in carrying out the responsibilities of the placement center. Each faculty representative would be responsible in part to the placement director and at the same time keep the dean of his college or department informed of all developments.

Although just a few functions of these faculty representatives have been enumerated, there would be many other ways in which the faculty might participate.

#### SCHEDULE INTERVIEWS

All placement materials, including records and vocational information, would be on file at the center. Each faculty representative would have a private office in the center and would interview candidates from his college or department. It would be his responsibility to select suitable candidates for interviews, and it would be the responsibility of the center to arrange for and schedule all interviews.

Placement policies would be formulated by a committee composed of these representatives. It would be their responsibility, under the leadership of the director, to make major policy decisions.

This plan has a great deal of merit and is worth considering as an answer to some of the problems that will be facing some institutions of higher education. Many variations can be used, but the centralized and coordinated placement center that utilizes some of the faculty is one that every institution must consider as one move forward into the challenging future.

THE INTERNAL REVENUE CODE OF 1939 was completely silent as to the tax status of fellowships and scholarships. In the absence of statutory language, the Internal Revenue Service was free to adopt its own regulations on the subject, limited only by the basic concept that true gifts are not taxable to the recipient as income. In general, the Treasury Department took the position that the cash stipend of the holder of a fellowship was taxable unless the recipient could show that the payment to him was intended as a gift and not as compensation for service rendered. The question of what was and what was not a gift was frequently at issue with the taxing authorities.<sup>1</sup>

In the case of candidates for degrees, there was little debate as to the tax free status of the stipend if: (1) the recipient rendered no service to the institution making the award, (2) the recipient was free to select his field of study and research, and (3) no restrictions were placed on the publication and distribution of his thesis or dissertation.

However, postdoctoral fellowship stipends were almost always questioned by the Internal Revenue Service under the Code of 1939. One of the clearest examples of this unfortunate feature of the old code was the case of Dr. George W. Stone Jr., professor of English literature at George Washington University. In March of 1950, Dr. Stone received a letter from the Guggenheim Foundation informing him that he had been awarded a fellowship with a stipend of \$3000 to enable him to devote his full time for a year to a research project on which he had worked in his own spare time for several years.

The commissioner of internal revenue ruled that it was not the intention of the Guggenheim Foundation to make a gift to Dr. Stone but to pay him for service rendered. The case reached the tax court of the United States.<sup>2</sup>

According to the brief of the commissioner:

"It is argued that the purpose of the foundation is to promote the ad-

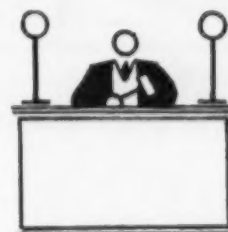
<sup>1</sup>Blackwell, T. E.: *Taxation of Fellowships*, Coll. & Univ. Bus. 8:17 (January) 1950. *Tax Legislation by Administrative Fiat*, Part 2, 9:41, (July) 1950. *Those Tax Problems Currently Plaguing Colleges*, Part 2, 13:46 (July) 1952.

<sup>2</sup>Stone v. Commissioner, 23 T.C. 254 (1954).

## Fellowships and the Tax Collector

T. E. BLACKWELL

Educational Management Consultant  
Washington University, St. Louis



vancement of knowledge and to add to the literary and scientific power of the country and that the fulfillment of this purpose depends upon the selection of projects from which results can be expected. Hence, it is not unreasonable to conclude that the foundation adopts as its own the projects proposed by the fellows it selects."

In other words, the foundation has many worthy tasks to perform and it selects persons qualified to perform them and pays them for service rendered.

### MAJORITY OF JUDGES DISAGREE

Fortunately, for higher education, the majority of the judges of the tax court disagreed with this point of view. In the words of Judge Tietjens:

"The fellowship award was not paid pursuant to a contract and was not payment for services. It was a gift...."

Judge Turner wrote a vigorous dissent in which he was joined by four other judges of the tax court. The following is an excerpt from his dissenting opinion:

"However strong the feeling or desire may be that the doing of such work as that herein be fostered and promoted, we must leave to Congress the prerogative of saying that the compensation for service rendered in the doing of such work is to be free from taxation."

Eventually, Congress did take cognizance of this problem. The provisions of the 1954 code with respect to the tax status of postdoctoral fellowship

stipends are quite specific.<sup>3</sup> If the recipient is not a candidate for a degree, the fellowship stipend is tax free only if the following conditions are met:

1. The fund from which the stipend is paid must have been received from an organization or foundation exempt from taxation, or from a governmental agency.
2. The stipend must not exceed an amount equal to \$300 times the number of months for which the recipient received payments under the fellowship grant, and for a total period not to exceed 36 months, whether or not consecutive.

For example, the maximum amount of tax free postdoctoral fellowship stipends payable to an individual during his lifetime under the 1954 code would be \$10,800, i.e. \$300 times 36 months. However, if the individual received, for example, only \$100 per month for the first 30 months of his fellowship, he would be entitled to receive only \$1800 additional tax free, i.e. \$300 times six, or a total of only \$4800 during the 36 months, tax free.

### STILL SUBJECT TO REVIEW

In the case of predoctoral fellowships, the question of the possible effect of the business interest of the grantor in the results of the research of the fellow is still subject to review under the 1954 code. Recently, a graduate student received a grant from a

<sup>3</sup>Section 117 (b) (2).



foundation to enable him to take a semester's leave of absence from his college in order to complete his research for the preparation of his doctoral dissertation. Many of the firms contributing to the foundation making the award were manufacturers, wholesalers and retailers. They all had a direct business interest in the research to be conducted and would probably derive some benefit from the research report.

In other words, there was some doubt as to whether the fellowship

was, in fact, a gift. A ruling from the Internal Revenue Service was requested. Tax rulings, unlike the decisions of the tax court, do not disclose the identity of the individual and of the institutions involved. The following is an excerpt from the ruling.<sup>4</sup>

"In the instant case, the primary purpose of the grant clearly is to aid the taxpayer in the completion of his doctoral research and dissertation for

<sup>4</sup>Revenue Ruling 56-419. Internal Revenue Bulletin, Aug. 27, 1956.

the purpose of furthering his education and training. The fact that the foundation may possibly derive some benefit from the taxpayer's research and dissertation does not, of itself, affect the result. Because the taxpayer is under no commitment to the foundation as to the course of his research or the subject matter of his thesis, the grant does not represent compensation for personal services and is, therefore, excludable from his gross income under the provisions of section 117 (a) of the code."

## **University of Wisconsin finds that**

# ***Using Student Labor Is Worth While***

**NEWELL J. SMITH**

*Director of Residence Halls, University of Wisconsin*

ONE OF THE THINGS THAT IMPRESSES foreign visitors most when they visit our campuses is the large number of students who work to help pay their way through college. At Wisconsin about 88 per cent of our undergraduate men and 73 per cent of our undergraduate women work for all or part of their expenses. In residence halls alone, we have about 350 students working.

There are several reasons why students are employed in such great numbers. Student jobs can provide a convenient form of scholarship for needy students. The local labor supply may be inadequate. In many instances, it is a method of promoting good public relations. Some colleges may employ students because of lower wage rates. A few schools do not consider it worth while and do not employ students as workers. Most schools, however, employ students but complain that they are not dependable, that they are careless or slipshod in their work, that there is too much horseplay. Other complaints are that there are too many class conflicts and that students always want to leave before vacations or during examination periods.

I believe that employing students is well worth while. My judgment on

the matter may be influenced by the fact that I myself was a student employee for four years. Not only did I receive the financial aid that was so necessary, but I learned much from the experience. Now, as a member of a department that employs many students, I still feel that student employment is worth while. We employ students in our residence halls at Wisconsin because we need them to fill in during peak work periods. They make good employees, and we perform a measure of education in providing the work experience for them.

### **NOT HIRED ON BASIS OF NEED**

We make no attempt to hire students on the basis of need; we hire on a first come, first appointed basis. Our base rate is 85 cents per hour, and we offer merit increases at the end of each semester, which can raise the base rate to a maximum of 95 cents per hour. On special jobs, which are more difficult or require more skill, the rate is a dollar per hour or more.

Most of our students are employed in the food units. However, we do have some desk attendants, and we employ a few for maintenance work, such as washing windows and waxing floors, during vacation periods. A committee

of six, four of whom are food supervisors, guides our student employment program. This committee reviews the program periodically and during the last few years has made several major changes.

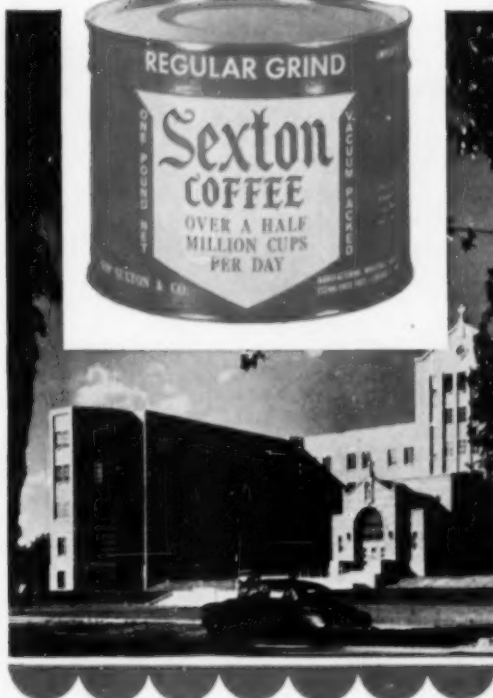
One of the biggest changes has been the switch from payment in meals to a cash hourly wage. This change was made reluctantly because there are many advantages to a meal job plan. Both parents and students like the idea of guaranteed meals, and, when payment is in meals, there is less comparison with wages being paid elsewhere. There used to be a tax advantage to the student by reporting the actual cost of meals instead of the purchase price, but that is no longer possible.

There are also some disadvantages to a meal job basis as compared to a cash basis. When we guaranteed two meals per day to each student employee, we designed their jobs to take about two hours per day, but there was an incentive to rush through the job as they were not being paid on a time basis. This led to a certain amount of slipshod work, dish breakage, and such. Also, we found that if payment is made by the job rather than by the time worked, it is difficult to allocate the jobs equally and make the most



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St. John Hospital  
Detroit, Mich.



# Sexton

## Quality Foods

JOHN SEXTON & CO., CHICAGO, 1956

efficient use of student workers. The system provides little flexibility to take care of light menus or light crowds.

When the change to a cash hourly wage was made, we tried to combine the best features of both systems. We tied the base hourly rate to the meal value. Our students always had worked two hours per day and received lunch and dinner. In setting our new rate, we took the cost of lunch and dinner and divided it by two; this permitted a student to work two hours and get the equivalent of lunch and dinner in value as before. Our base hourly rate is now 85 cents per hour. Tying the base hourly rate to the meal value also provides a built-in wage adjustment because when the board rate goes up the wage rate goes up.

We try to schedule three-fourths of our student workers to work an average of two hours per day and receive the equivalent of lunch and dinner. They must work the number of hours required, and they are paid only for the time that they work. The supervisor determines how, when and where they will work. The remainder of our students are hired on an intermittent basis to provide the flexibility necessary when we have light menus and light crowds. This flexibility is important when there are regular employees on a 40 hour week and a straight shift. To date, the results of this change to an hourly wage have been very favorable.

#### MERIT SYSTEM OF INCREASES

Since a merit increase system was instituted, students are eligible for a merit increase of 5 cents per hour at the end of a semester's work if they have worked 150 hours during the semester and if they have a good rating. This merit increase was intended to serve as an incentive and as a recognition of good service. It requires additional administrative work, but the results have been generally good.

We have tried to make more effective use of our rating system. Previously, the system was composed mostly of informal, written comments by our supervisors; we now use a mimeographed form on which the criteria for rating are listed. Attributes such as cooperativeness, dependability, grooming, appearance and quality of work are listed and taken into account. This helps to keep the ratings objective and provides a better chance for the same considerations to be used in rating all students. Students are rated before

the end of each semester. If a rating is not good it is reviewed with the student. A point system ties these ratings in with the merit increases; three points are given for each rating of excellent, two for good, one for fair, and zero for poor. A student becomes eligible for a 5 cent increase in his hourly wage if he receives 14 out of a possible 21 points. These merit rating sheets are retained in our files for several years after the student is gone.

We have tried to strengthen our orientation and training of student em-



ployes. Fourteen student supervisors are the backbone of our student employment program. Their work includes scheduling workers, seeing that all jobs are covered adequately, handling time cards, and working directly with food supervisors on discipline and other problems. They receive a salary of between \$60 and \$90 a month, depending upon the number of students they must supervise.

A formal training program covering five general areas was developed for these student supervisors: (1) We cover the philosophy of student employment. (2) We try to teach them how to instruct and train workers. (3) We review personnel and administrative procedures. (4) We go into detail on time cards and payroll procedures. (5) We spend quite a bit of time on the technics and mechanics of supervision.

Student supervisors are appointed in the spring, and for several weeks they are assigned to the current supervisors for on-the-job training. They are called back one week early in the fall during freshman week. At that time our units are operating at reduced capacity and the supervisors can begin their work under less pressure. During this week, we have meetings of two hours' duration on each of three days, and during the semester we schedule

two or three meetings for these student supervisors. Early in the semester a meeting is held as a refresher on sanitation and, toward the end of the semester, we have a training session on merit ratings. Also, there are always current problems to be discussed.

We have benefited greatly from this program. By distinguishing our student supervisors as a group, it gives new importance to their jobs and, consequently, we have received greater loyalty and a real sense of proprietorship from them.

There is also a training program for other student workers, although it is not as comprehensive as the student supervisor program. Student workers report back one day early in the fall and attend a general meeting in each unit. The director or one of the assistant directors welcomes them or keynotes the meeting to add importance. All meetings must be planned to give an air of importance; if students don't feel they are important, they will come reluctantly or look upon the meeting as a waste of time.

At this general meeting, we explain general procedures, discuss the proper attitude toward the job and toward other people, specify what is expected, and have a tour of the facilities. Student workers are then divided into job groups; those who work in the dishrooms go together, and those who work in the servery or on the scrape tables go together. They are given specific assignments and are taught the mechanics of the job by student supervisors or older employees.

#### PAID FOR TIME IN MEETINGS

One or two meetings of student workers are scheduled during the semester to review such subjects as sanitation and policy. In addition, we always have meetings by job groups if required. Students are paid for the time spent in meetings. Their attendance is requested, and we believe they are entitled to remuneration.

We spend quite a bit of time in our residence halls on our student employee program, but we feel it is more than justified by the returns. It is one of our best means of good public relations throughout the state, within the student body of the university, and among our own residents. It would be difficult to operate without student employees, and we would not want to. Most of the members of our top staff are former student employees from our own halls.

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# NEWS

**Municipal Universities Pay Highest Salaries . . . Recommendations  
in Interim Report of President's Committee . . . Finds TV Students  
Type Faster and Better . . . Two Hartford Colleges Plan Merger**

## **President's Committee Cites Needs for Aid at College Level**

WASHINGTON, D.C.—Devereux C. Josephs, chairman of the Committee on Education Beyond the High School, submitted the first interim report of the committee to President Eisenhower on November 19 following a series of five meetings to determine the scope of the committee's work and suggestions as to its areas of emphasis.

The interim report proposed that a definite policy be established by the federal government in terms of financial appropriations for higher education. The committee pointed out that more than a billion dollars now goes to educational concerns in higher education but that there is no organized or comprehensive policy relative to such appropriations. These appropriations include G.I. and Korean bill allocations to veterans, appropriations to land-grant universities, research activities, and college housing programs.

The committee also was critical of any "crash program" established to recruit more doctors, teachers, engineers, atomic scientists, or other specialists. It did not feel this emphasis on special occupations was a sound or desirable method of attacking a serious problem.

In another recommendation, the committee suggested the necessity of state-by-state surveys of needs for faculty and buildings. It emphasized that such studies should be participated in cooperatively by both state and privately supported institutions. It also suggested that, in view of the many persons wishing to get education following high school, it would be desirable to study all means of education, such as adult education, regular four-year college program, and graduate work, and to consider a modification of the time schedule customarily considered desirable for higher education.

It recommended that a series of conferences in five regions be set up by the committee to give attention to basic questions that local and state groups ought to be considering.

To prepare for these conferences, the Committee on Education Beyond the High School held five regional workshops organized under the auspices of an organization or institution in each region. These were the Southern Regional Education Board, the Western Interstate Commission for Higher Education, Radcliffe College, University of Illinois College of Education, and New York University.

## **New Computer Center to Serve 11 States, Hawaii**

LOS ANGELES.—Establishment of the world's first university computer center devoted primarily to the study of complicated business management problems was announced here last month by representatives of the University of California at Los Angeles.

Called the Western Data Processing Center, it will be located on the U.C.L.A. campus but will be used by business researchers and students from colleges and universities in 11 western states and Hawaii. The project is a major step toward solving the growing shortage of business analysts schooled in the use of electronic computers.

The new center was made possible by a series of gifts from the International Business Machine Corporation, including the use of a 705 electronic data processing machine, a giant digital computer designed especially for business data and management problems.

The computer will be housed in its own \$750,000 research building. The computer center will be closely allied with a multi-million dollar graduate school of business administration building at U.C.L.A. for which plans are now being prepared.

## **N.E.A. Releases Comprehensive Study of Salary Schedules**

WASHINGTON, D.C.—Institutions of higher learning face enrollments that are increasing at a higher rate than those at any other educational level—and they face this serious crisis paying faculty members an average salary of \$5243.

These data were revealed in the comprehensive survey of salary schedules in the nation's universities and colleges released recently by the research division of the National Education Association.

Facts disclosed by the survey are published in the N.E.A.'s quarterly *Research Bulletin* titled, "Salaries Paid and Salary Practices in Universities, Colleges and Junior Colleges, 1955-56." They show that, on the average, municipal universities pay the highest salaries with state universities running second; that larger colleges pay more than the smaller ones, and that public institutions pay more than nonpublic institutions.

A geographical breakdown shows faculty salaries vary considerably from one part of the country to another, with the highest average—\$5758—paid in the far West. The lowest average—\$4799—is paid in the Southeast. This difference of nearly \$1000 shows up in all ranks of teachers and in all types of institutions.

Though administrative positions in the \$25,000 to \$30,000 bracket are not unknown and salaries of \$10,000 or more for straight teaching during the academic year can be cited, overall financial opportunities for teaching and administrative personnel are tragically limited.

The average college president receives \$11,314; the average full professor, \$7076; the average associate professor, \$5731; the average assistant





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professor, \$4921, and the average instructor, \$4087.

Released at a time when most institutions are planning budgets for the coming year, the survey covers the year 1955-56 and is based upon replies from 730 degree granting institutions and 258 junior colleges.

Most colleges and universities try to maintain salary schedules, the report indicates. But the scarcity of new teachers in certain fields has forced the abandonment of schedules in many instances. Often an attractive candidate is offered a higher salary or a

higher rank than the schedule provides. "Such emergency measures immediately exert a depressing effect on the morale of all other teachers on the staff," the study reports.

Data relative to salaries paid in administrative positions are also revealed. The median for the college dean is \$7495; for the registrar, \$5230; for the head librarian, \$5437; for the business manager, \$6682. The salaries reported are for the full year but do not include such extras as a car or house frequently provided for the president, but rarely for any other official.

## Segregation Rules Change Harvard's Plans

CAMBRIDGE, MASS.—Harvard University, in a protest against racial segregation in sports, has canceled plans to send its varsity basketball team into the South this year during the Christmas holiday period.

Although no Negro is on this year's squad, the faculty committee on athletics announced that a projected basketball trip to four southern states had been called off because segregation rules would prevent Harvard from selecting its own players.

The team had been scheduled to play Georgia Tech, Loyola University in New Orleans, University of North Carolina, and the service team at the marine base at Quantico, Va.

Because of action taken by the Louisiana legislature in passing a law banning racially mixed athletics in the state, and the action by the board of regents of Georgia's university system, which has banned Georgia's teams from participating in contests in the South that do not follow the segregation laws and customs of that state, Harvard officials felt that they had no alternative other than to cancel the plans for a trip. Harvard was not prepared to make the trip South for the two games with the marines and the University of North Carolina.

## Adopts New Health Insurance Program

BRADFORD, MASS.—Bradford Junior College has adopted a comprehensive health insurance program for all employees, the Rev. Robert Wood Coe, president of the board of trustees, announced recently.

The new program, which became effective last month, includes hospital, maternity, surgical, catastrophe and life insurance benefits. Under it, the college contributes 80 per cent of the cost for each employee, 20 per cent for a husband or wife, and an additional 20 per cent for other dependents. The college's total annual contribution will be approximately \$12,000.

"Such a program was decided upon," Dr. Coe said, "after long and careful deliberation on the part of the trustees with the desire of reducing materially the burden of crippling medical expenses that might be incurred without warning."

Of a total staff of 138, 86 per cent have enrolled in the voluntary pro-



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gram. It replaces a group medical and surgical insurance program formerly supported wholly by employees.

## Plan Merger of Two Hartford Colleges

HARTFORD, CONN.—Officials of Hillier College and the Hartt College of Music recently announced that they plan to merge the institutions to form the University of Hartford. The general assembly of Connecticut, which convenes in January, will be asked to grant a charter for the new university.

An application for a license to operate as the University of Hartford has been filed with the state board of education.

The new institution will be located on 150 acres in the northwest section of Hartford. The tract was purchased recently by Hillier College. Present plans call for completion of the first phase of construction of the new institution by 1959.

Hillier College, a liberal arts institution, has been in existence for 76 years. It became coeducational in 1928. The Hartt school was founded in 1920.

Combined enrollment during the present term exceeds 7200 students. The combined faculty and staff members total more than 400.

Under present plans, both colleges will maintain academic identity under the university framework. Each college will retain its board of trustees, administration and faculty.

## TV-Taught Students Type Faster, Better

EAST LANSING, MICH.—Typewriting can be taught more effectively by television than by an instructor in the classroom, according to results of a study by the bureau of business research at Michigan State University. The experiment was conducted by William R. Pasewark, now at Texas Technological College, while he was an instructor in business education at M.S.U.

He found that television-taught students, with no instructor in the room, not only learned to type faster but also made fewer errors than students taught by the conventional classroom method.

"Contrary to some opinion, the absence of an instructor may have contributed to this superiority of telestudents for they may have assumed more personal responsibility for their learning," Mr. Pasewark reported.

The novelty of learning through television also may have motivated the students' action beyond normal expectation, he said.

Two groups of 22 students were used in the experiment. They were matched almost identically for intelligence and were given the same course, by the same instructor, in half-hour periods, five days a week for 48 days.

One group was taught in the classroom. The other students were arranged into groups of three and four and were instructed only by open-circuit telecasts from Michigan State University station WKAR-TV.

Students instructed by television typed faster on all nine timed tests during the course, Mr. Pasewark said. The experimental group on the final test averaged 35.4 words a minute and 4.5 errors per student, while the conventional group averaged only 29.3 words per minute and made an average of 5.9 errors per student.

Mr. Pasewark listed as prospective telestudents housewives who want to learn typewriting for personal use and possible future job skill, students who

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cannot or prefer not to take type-writing in school, professional persons whose jobs involve considerable writing, people who want to brush up or improve on their typing, and anyone who wants to learn but cannot attend school.

## Court Upholds College in Excluding Negroes

PHILADELPHIA.—On a decision rendered November 12, the Pennsylvania State Supreme Court upheld a will limiting enrollment in Girard College

to fatherless white boys. Chief Justice Horace Stern, who wrote the majority opinion, stated: "It is one of our most fundamental legal principles that an individual has the right to dispose of his own property by gift or will as he sees fit."

Justice Stern, noting that the city of Philadelphia had joined in the attack on the will, said that the "beneficiaries of the charity of Stephen Girard are not being determined by the state of Pennsylvania, nor the city of Philadelphia, nor by this court but solely by Girard himself in the exercise of his

undoubted right to dispose of his property by will, and, in so doing, to say within the bounds of the law who shall enjoy its benefits."

Justice Stern said that this case "is not to be confused with the so-called desegregation cases," which dealt with public schools where no discrimination in respect to race, creed or color, as the United States Supreme Court has decided, is permissible under the Fourteenth Amendment.

Girard, who died in 1831, provided in his will that the city of Philadelphia take possession of the majority of his estate and that it set up a boarding school for "poor, male, white, orphan children."

Justice Michael Musmanno, in dissenting, said that Girard College is not a private institution even though it was set up by the private funds of Stephen Girard. He said that a person in his will "is entitled to choose the beneficiaries of his bounty, but if he asks the government to administer his estate he cannot expect the government to ignore the very law it symbolizes. . . . No testator has the right to ask the government to do something which is prohibited by the Constitution."

## Grants Free Tuition to Employees' Children

ITHACA, N.Y.—Cornell's board of trustees has voted to grant free tuition at the university for children of any employe with 10 years' continuous service, President Deane W. Malott announced recently. Free tuition is allowed up to 14 semesters' academic work.

The board voted the same privilege, regardless of length of service, to non-academic employes in administrative, supervisory or professional positions in certain classifications and salary ranges.

The university has long given, and will continue to give, free tuition to children of full-time faculty members in the rank of professor, associate professor, or assistant professor, regardless of length of service.

The privilege covers all permanent, full-time employes except those at the medical college and school of nursing in New York City. It continues while an employe remains in the university's service, or if he retires, dies or becomes permanently disabled.

The ruling does not include the college and university general fee, which will amount to \$175 a year in most



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Cornell divisions, beginning next fall. The tuition rate in endowed colleges, effective next fall, will be \$925 a year, so that the free tuition privilege can mean a saving up to \$6475 for the student who takes advantage of the full 14 semesters.

### \$60½ Million Dormitory Program for Ohio State

COLUMBUS, OHIO.—A comprehensive residence hall building program, costing an estimated \$60,485,850 and aimed in the next few years at provid-

ing a total of 13,499 places for men and women students, nurses and married students, received approval of Ohio State University's board of trustees at its November meeting.

Brig. Gen. Carlton S. Dargusch, board member who presented the history making program, said that Ohio State anticipates an enrollment of 26,500 by 1960. Present enrollment is 22,500. The university presently has 3111 housing units, including those now under construction.

General Dargusch proposed that the university be authorized to proceed

immediately with the construction and financing of three 11 story men's residence halls at an estimated cost of \$8,133,500, including furnishings. Plans and specifications for these units, providing housing for a total of 1488 students, were approved by the board.

The entire dormitory building program will be self-liquidating, without the use of tax money. The board authorized the university administration to apply to the regional office of the federal Housing and Home Finance Agency for the loan of funds for refinancing existing indebtedness on present residence halls for the three new dormitories to be constructed immediately. Also authorized was a request to the Housing and Home Finance Agency for advance planning funds covering the total estimated cost of future construction of \$48,100,000.

### Tells What to Expect in Safety Precautions

CHICAGO.—Parents who provide an accident-free environment at home can expect a college to do the same when young people leave home for the campus. That was the belief expressed at the 44th annual National Safety Congress by a parent who is also the state director of health and physical education of the Indiana State Board of Health at Indianapolis.

Robert Yoho said that, despite his job, "my concern with my son's safety is neither greater, nor less, than that of most of the fathers and mothers who have sons and daughters in college today."

Among the college safety precautions he said he expected are the following:

1. That the residence halls and classroom buildings be built in accordance with safety standards of the state building code.
2. That drills for evacuating the building in case of disaster be regularly practiced.
3. That measures be taken to impress upon each student his personal responsibility for action that protects him and other students.
4. That college officials be prepared to take disciplinary action in cases of foolhardy or careless acts on the part of all students.
5. That college laboratories and experimental work places have safeguards equal to those practiced in U.S. industry where comparable scientific and industrial activities take place.



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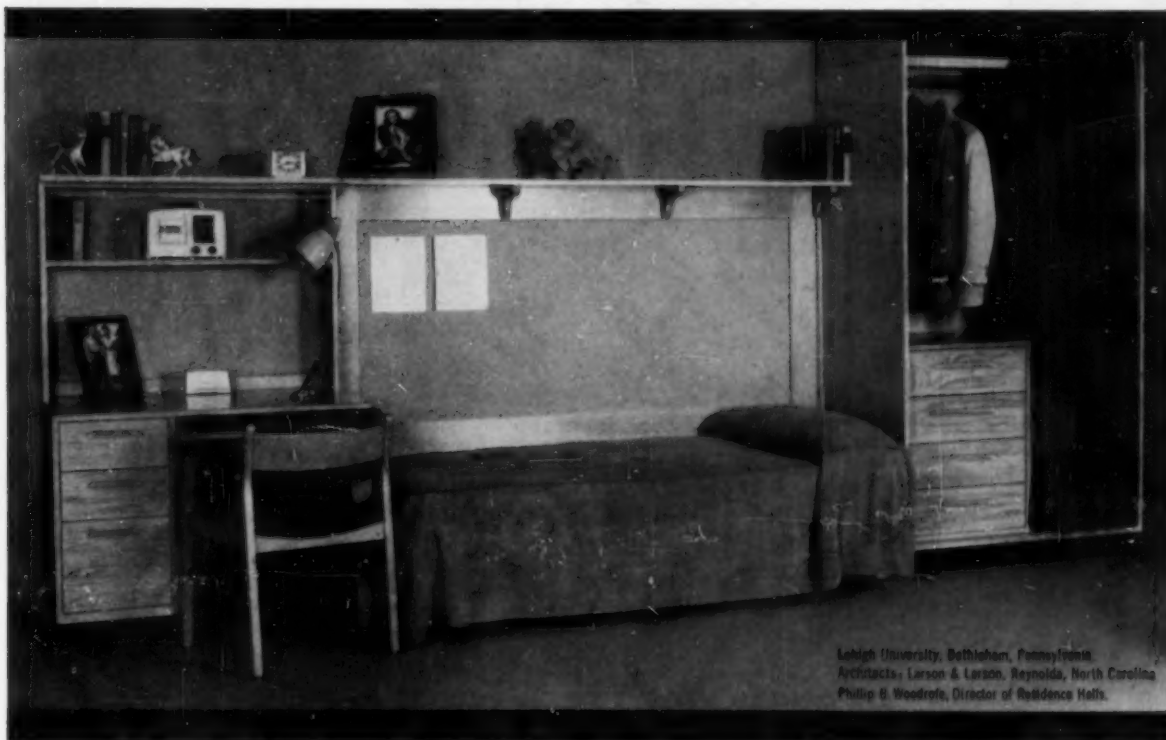
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## NAMES IN THE NEWS



Elmer Jagow

Elmer Jagow, formerly business manager of Concordia Teachers College, River Forest, Ill., has been appointed business manager of Knox College, Galesburg, Ill. Mr. Jagow succeeds T. N. McClure, who resigned recently to become business manager of the University of Rhode Island. Fred Spurgat, assistant business manager at Concor-

dia, has been named acting business manager of the college.

Carl F. Floe, professor of metallurgy and assistant provost of Massachusetts



Carl F. Floe



Malcolm G. Kispert

Institute of Technology since 1952, has been made assistant chancellor. Mal-

colm G. Kispert, executive assistant to President James R. Killian Jr. of M.I.T. since 1952, also has been made assistant chancellor.

Dr. Charles M. Lee, president of Geneva College, Beaver Falls, Pa., since 1948, resigned recently. The trustees appointed Dr. Edwin C. Clarke, vice president of the college, to succeed him.

Dr. Cornelis W. de Kiewiet, president of the University of Rochester, Rochester, N.Y., was recently elected president of the Association of American Universities.

William C. Friday, acting president of the Consolidated University of North Carolina since March 1, has been named president. The Consolidated



William C. Friday

University, since 1931, comprises the University of North Carolina at Chapel Hill, the State College of Agriculture and Engineering at Raleigh, and the Woman's College at Greensboro.

Dr. Oliver C. Carmichael, president of the University of Alabama, announced on November 5 that he would resign by January 1 to accept a post with the Fund for the Advancement of Education, an agency established by the Ford Foundation.

Dr. Coleman R. Griffith, former provost of the University of Illinois, has been named director of a new Office of Statistical Information and Research under the auspices of the American Council on Education. The office will be operated in Washington as part of the council's central program under a five-year grant of \$375,000 from the Carnegie Corporation of New York.

Ossian R. MacKenzie, dean of the college of business administration at Pennsylvania State University, has been made special assistant to the president, in charge of business affairs. He will serve in the new position until June 30, and during this period will also continue as dean.



Ossian R. MacKenzie

Louis D. Day Jr., director of Hous-ton Hall, the student activities center at the University of Pennsylvania, has been named director of public affairs for the University Museum, effective next April 15. Mr. Day was national president of the Association of College



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Unions in 1953-54 after having been vice president the preceding year.

**Dr. Laurence M. Gould**, president of Carleton College, Northfield, Minn., has been appointed director of the United States International Geophysical Year Antarctic Program. The appointment was made through **Detlev W. Bronk**, president of the National Academy of Sciences, on the recommenda-



Laurence M. Gould

tion of **Joseph Kaplan**, chairman of the U.S. National Committee. Dr. Gould, a veteran of several Antarctic expeditions, was second in command and geologist with the 1928-30 Byrd Antarctic expedition.

**Dr. Wilfred Bloomberg**, Boston psychiatrist, will head up the South's Regional Program in Mental Health Training and Research under the auspices of the Southern Regional Education Board.

**John A. Hannah**, president of Michigan State University, left East Lansing in mid-November on a combined mis-

sion for the university and the federal government which, before his return on December 22, will take him to 11 countries and around the world.

**Paul D. Davis**, construction engineer from Albany, N.Y., has been named superintendent of buildings and grounds at Smith College, Northampton, Mass. He assumed his new duties on November 12, according to an announcement by **William A. Bodden**, treasurer and controller. Mr. Davis, who succeeds the late **George King**, was commander in the navy during World War II.



Paul D. Davis

**Robert A. Saunders**, formerly chief tax accountant for the Cooperative Grange League Federation Exchange, Inc. in Ithaca, N.Y., is now project director in the development department of Cornell University.



Robert A. Saunders

**Charles E. Bunnell**, 78, founder of the University of Alaska, died recently in Burlingame, Calif. He founded the university in 1923 and served as its president until 1949.

**Dr. Hardy Liston Sr.**, president of Johnson C. Smith University, Charlotte, N.C., and a leader in the field of Negro education, died recently at 67 years of age. He had been president of the university since 1947.

**Dr. Charles S. Johnson**, sixth president of Fisk University, Nashville, Tenn., and the first Negro to head the institution, died suddenly of a heart attack while in Louisville. He had been president of Fisk since 1947 and was a member of the National Manpower Council and a former U.S. delegate to UNESCO.

**Julia Wurzbarger Neumann**, founder of the Ethical Culture School of Brooklyn, N.Y., in 1922, and its director for 28 years, died recently at the age of 79.

**Rev. Daniel H. Conway, S.J.**, 64, provincial of the Missouri Province of the Society of Jesus from 1950 to his illness last April, died recently. He was president of Rockhurst College in Kansas City from 1933 to 1940, president of St. Mary's College at St. Mary, Kan., from 1940 to 1946, and rector of St. Joseph's Hall at Decatur, Ill., from 1947 to 1950.

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**MOST SATISFYING to every student . . .**

• Students look forward to shower bathing that will banish fatigue from work or play and restore the feeling of fitness. But just *any* shower head won't satisfy. To win enthusiastic approval, provide the *Act-O-Matic* cone-within-cone spray that delivers an evenly distributed and never distorted shower, directed as desired, and with fingertip volume control.

**...and BEST FOR YOU because:**

- 1 • Automatically Self-Cleaning—
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- 10 • Requires No Servicing—
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Formica's smooth easy-to-clean surface, its rugged resistance to scratching and abrasion, its complete indifference to boiling water, alcohol, and mild acids or alkalis makes it the ideal material for all school surfaces exposed to heavy use.

Student and teacher furniture, window stools, walls, cafeterias, laboratories, home economics kitchens, all offer Formica a chance to pay its way in reduced maintenance costs.

When refinishing, remodeling or building specify genuine Formica surfaces.



### Old Desks Can Be Formica Surfaced Too!

It's a simple and inexpensive job to resurface worn rough desks with Formica. A Formica representative will gladly show your own maintenance people how to do the job or recommend a skilled Formica fabricator near you.

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## DIRECTORY OF ASSOCIATIONS

### National Federation of College and University Business Officers Associations

President: Nelson A. Wahlstrom; University of Washington; vice president: Thomas E. Blackwell, Washington University, St. Louis; secretary-treasurer: C. H. Wheeler III, University of Richmond.

### College and University Personnel Association

President: James N. Ewart, California Institute of Technology; secretary-treasurer: Shelton F. King, Carnegie Institute of Tech-

nology; executive secretary: Donald E. Dickason, University of Illinois. Permanent headquarters, 809 S. Wright St., Champaign, Ill.; Kathryn Hansen, editor, C.U.P.A. Journal. Convention: Aug. 4-7, University of Colorado, Boulder.

### National Association of Educational Buyers

President: M. T. Tracht, Illinois Institute of Technology; executive secretary: Bert C. Ahrens, 1461 Franklin Ave., Garden City, N.Y. Convention: April 30-May 3, Sheraton Gibson Hotel, Cincinnati.

### Association of College and University Housing Officers

President: Donald W. Kilbourn, Central Michigan College; secretary-treasurer: Leonard A. Schaedt, University of Michigan.

### National Association of College Stores

President: Ray Vanderhoef, Iowa Supply Co., Iowa City, Iowa; general manager: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio. Convention: April 23-27, Sherman Hotel, Chicago.

### National Association of Physical Plant Administrators of Universities and Colleges

President: A. F. Gallistel, University of Wisconsin; secretary-treasurer: A. F. Gallistel, University of Wisconsin. Convention: May 13-15, Temple University, Philadelphia.

### Associations of College and University Business Officers

#### American Association

President: Harold K. Logan, Tuskegee Institute; secretary: B. A. Little, Southern University. Convention: May 5-7, Washington, D.C.

#### Central Association

President: Roscoe Cate, University of Oklahoma; secretary-treasurer: Ralph Olmsted, Evansville College, Evansville, Ind. Convention: March 31-April 2, Shamrock Hotel, Houston, Tex.

#### Eastern Association

President: Marcus Robbins, Yale University; secretary-treasurer: Kurt M. Hertzfeld, University of Rochester.

#### Southern Association

President: R. K. Shaw, Florida State University; secretary: C. O. Emmerich, Emory University.

#### Western Association

President: Glen C. Turner, Colorado State College of Education; secretary: Harry E. Brakebill, San Francisco State College. Convention: April 21-24, Empress Hotel, Victoria, B.C.

### Canadian Association of University Business Officers

President: B. F. Macaulay, University of New Brunswick; secretary-treasurer: F. J. Turner, Carleton College.

### American College Public Relations Association

President: Bradford D. Ansley, Emory University; executive secretary: W. Noel Johnson, 1785 Massachusetts Ave., Washington, D.C. Convention: June 24-27, Hotel Fontelle, Omaha, Neb.

### Association of College Unions

President: Earl E. Harper, State University of Iowa; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin. Convention: March 31-April 3, Hotel Utah, Salt Lake City.



## ...MICHAELS *Time-Tight* EXHIBIT CASES

Michaels exhibit cases, made of extruded bronze and aluminum, are recognized everywhere for their high quality, distinctive appearance, maximum visibility, flexibility of interior arrangement, and other advantages. Innerlocking frames, exclusive with Michaels, mitered intersections, and other structural features, assure protection against ingress of dust and vermin, as well as security against handling and theft. Many types are available: table, aisle, corner, suspended and recessed cases in standard sizes or custom built.

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# classified advertising

## POSITIONS WANTED

**Bookstore Manager-Purchasing Agent**—45 years old, college graduate, several years experience; also experience with university printing and public relations department. Write CW 311 COLLEGE AND UNIVERSITY BUSINESS.

**Business Management**—M. A. in economics, sixteen years general administration of private school, seeks position in college, university, or private school; prefers New England but will weigh any opportunity; available in 1957-58; present salary \$5,000, plus house and food for foursome. Write Box CW 320, COLLEGE AND UNIVERSITY BUSINESS.

**Controller — Business Manager — Treasurer** — Successful college treasurer and business manager fourteen years, college teaching in business administration five years, experienced in accounting, budget preparation and control, financial reporting, purchasing and plant maintenance; have understanding and imagination; presently employed in college; desires change. Write Box CW 314, COLLEGE AND UNIVERSITY BUSINESS.

**Food Service Director**—Successful administrator with diversified experience in large volume commercial and institutional operations. Understand budget control, food and labor costs, purchasing and operating at management level. Write Box CW 317, COLLEGE AND UNIVERSITY BUSINESS.

**Superintendent of Buildings and Grounds**—Seeking position at college or university; experienced; college trained; presently employed in this capacity at public school system; complete resume on request. Write Box CW 319, COLLEGE AND UNIVERSITY BUSINESS.

**Treasurer-Business Manager**—Experienced in budgeting, accounting, purchasing, personnel, food service, dormitory administration, maintenance, new construction, etc. B.A. M.S. School Business Management. Write Box CW 318, COLLEGE AND UNIVERSITY BUSINESS.

## POSITIONS OPEN

**Assistant Purchasing Agent**—Rapidly growing south eastern state university; enrollment approximately 8,000; experience preferred, trainee will be considered; salary commensurate with experience. Write CO 203 COLLEGE AND UNIVERSITY BUSINESS.

**Assistant to Treasurer (Comptroller)**—New position in New England liberal arts college for men; excellent opportunity for young man, college graduate, experienced in accounting, budgets, statement preparation, systems work; experience in public accounting or college accounting desirable. Send full details, photo to CO 210, COLLEGE AND UNIVERSITY BUSINESS.

**Bookstore Manager**—Growing southwest college; annual gross \$150,000; college bookstore experience preferred; salary dependent upon experience; please include resumé of experience and salary range acceptable. Write Box CO 208, COLLEGE AND UNIVERSITY BUSINESS.

**Comptroller**—Resourceful and experienced man with active religious and community interests desired to handle budget, accounting, treasury, administrative personnel, and related activities. Write SPRINGFIELD COLLEGE, Springfield 9, Mass.

**Superintendent of Buildings and Maintenance**—Large, private, well-established, year-round vacation center, within 40 miles of New York City, catering to business and professional people; physical plant program includes air conditioning, refrigeration, swimming pool, numerous fireproof buildings, extensive property and private lake; send late photo and details of age, training, experience. Write Box CO 205, COLLEGE AND UNIVERSITY BUSINESS.

**Superintendent Physical Plant**—New England liberal arts private college for men, excellent growing physical plant, has opening for experienced man to head its operating and custodial staff; including responsibility for central steam plant, electrical distribution system, grounds, repair and maintenance of buildings; excellent retirement, group life and health insurance benefits. Send photo and complete details to CO 209 COLLEGE AND UNIVERSITY BUSINESS.

**Working Accounting-Controller**—University, New York City metropolitan area; state salary. Write Box CO 207, COLLEGE AND UNIVERSITY BUSINESS.

## FOR SALE

For Sale, less than actual cost! Two brand new JAMES LEFFEL high pressure steam boilers complete with stokers; one boiler 125 H.P., one boiler 175 H.P. These boilers were purchased for a central heating plant at Sewanee, Tennessee, but never installed because of change to individual gas heating. Detailed information on request to Brice Building Company, Inc., P.O. Box 1028, Birmingham, Alabama. Will consider any reasonable offer.

The rates for classified advertisements are: 20 cents a word; minimum charge, \$4. (No charge for "key" number.)

Forms close 25th of month preceding date of issue.

**COLLEGE AND UNIVERSITY BUSINESS**  
919 N. Michigan Avenue, Chicago 11, Ill.



## The Insured TUITION PAYMENT PLAN

This is the prepayment plan that brings the parent low-cost life and disability insurance protection, plus a monthly budget provision that extends to the final month of his educational expenses four or more years hence. Used today in many of the best-known colleges and preparatory schools, it has proven most valuable to administrative officers by providing them with a dignified, parent-approved method which:

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- 4 preserves the traditional relationship between the college and the parent—debt-free and direct.

Individualized descriptive literature for mailing to the parents of incoming students is furnished for each preparatory school, college or university.

### WRITE TODAY FOR DETAILS

We should like to know more about the Insured Tuition Payment Plan as it would apply to the students at:

Name of School  
or College \_\_\_\_\_

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**INSURED TUITION PAYMENT PLAN**

112 WATER STREET  
BOSTON 9, MASSACHUSETTS



"Sure I weigh enough  
to operate the all new

## TORNADO 13" FLOOR MACHINE

with ease"

She's right . . . it's so easy and gentle to control the new Tornado 13" Floor Machine that it doesn't make any difference who operates this engineering marvel. Won't whip . . . even reduces operator fatigue. And, it takes only a jiffy to have sparkling, like new, floors. If you want a precision built, sturdy, easy to operate floor machine—that is well within the economic reach of all—you'll want the all new Tornado 13" Floor Machine.

*Heavy enough to do the job  
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Write for bulletin 763 or have an  
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Longbeach 1-6162



"So easy to carry"



"Scrubbing and polishing are  
as simple as sweeping now"



# WHAT'S NEW

December 1956

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 88. Circle the key numbers on the card which correspond with the numbers at the close of each description item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

## Powerized Bleachers Require No Effort

Roll-A-Way Bleachers that are fully powerized are now available as a result



of years of experimenting and development. Any section of ten, fifteen, twenty or more rows of bleachers can be opened or closed in a few seconds by one man. Known as the Poweroller, the basic item is a compact mobile electric power unit. The custodian merely directs an extended gripper arm into a small opening under the front row seat to operate the Poweroller. This engages an attachment bar under the bleacher section and a touch of the handle switch starts the section rolling.

The gymnasium floor is protected by the use of pneumatic tires which give enough traction for easy opening or closing. The operator has only to guide the unit from section to section and direct its action. If desired, the bleachers may also be opened or closed by hand. The manufacturer announces that powerization is now available for all new Roll-A-Way installations. **Universal Bleacher Co., Champaign, Ill.**

For more details circle #515 on mailing card

## Sound System Console Has Dual Channel

Two separate program sources can be distributed simultaneously with intercommunication on a separate channel with the new line of RCA Dual Channel Consoles for central sound distribution systems. The self-contained, compact, floor-mounted unit has all operating controls within easy reach on the functional main panel. Microphone and monitor speaker functions are combined in one unit and a separate microphone is not required. The RCA automatic three-speed record changer is mounted in a convenient drawer.

Programs from radio, records, tape or microphone can be distributed to any

or all loudspeaker zones. The new units permit immediate transmission of announcements, news, recorded programs, emergency and time signals to any area. Programs originating in remote locations, such as the auditorium or gymnasium, may also be broadcast to all or to selected areas. When equipped with a communication amplifier, intercommunication is possible at the same time the other channels are working. An "all call" switch cuts off all programs in case of emergencies. **Radio Corporation of America, Camden 2, N.J.**

For more details circle #516 on mailing card

## Door Key Opens Letter Box

The same key used for dormitory rooms can now be used for the letter box through a special arrangement between



The Federal Equipment Company and Schlage Lock Company. The Federal letter box assembly with door and cylinder locks is now set up to have both the locks and keys matched for any type of installation. Federal also has arranged for prompt key replacement service in event of loss of the original key. The new dual key arrangement is convenient, practical and efficient for students and residents. **The Federal Equipment Co., Carlisle, Pa.**

For more details circle #517 on mailing card

## Control Packs of Soluble Coffee

G. Washington's Soluble Coffee is now available in special packages for controlled service. The new 4½ ounce package is designed for use in a regular coffee urn and is described as the equivalent of one pound of ground coffee. The 22½ gram package for use in glass coffee makers can be used with regular glass coffee makers for 10 to 12 cups.

The new Institution H & R G. Wash-

ington's 100 Per Cent Pure Soluble Coffee is said to have the advantage of savings in coffee cost, in brewing time and in cleaning time. The new coffee is described as offering uniformly excellent cup quality with fresh coffee flavor. **American Home Foods, Institution Products, 22 E. 40th St., New York 16.**

For more details circle #518 on mailing card

## Air Conditioning For Large Areas

Carrier has expanded and improved its line of heating and ventilating products for large area buildings, schools, auditoriums and gymnasiums. There will be 72 capacities and coil arrangements in six different model sizes. A new "forward curved" fan is featured in the line which results in quiet, efficient performance at low speed.

The units can be installed by wall or ceiling suspension or floor mounting and can be used with steam or hot water. The units work equally well with or without ducts. **Carrier Corporation, 300 S. Geddes St., Syracuse 1, N.Y.**

For more details circle #519 on mailing card

## Two-Pupil Desk in Classmate Line

Desks or tables for the use of two pupils are a unit of the new Classmate Line of school furniture. Self-leveling, silicone-floating glides cushion the desks and automatically adjust to uneven floors so that the desks offer a firm writing table. High-pressure-type plastic, known as Amerex and developed by the manufacturer, is used for the desk tops for permanence and a smooth writing surface. The two-pupil desks are available



with or without sanitary steel book compartments in sizes from 24 by 48 inches to 36 by 72 inches. **American Seating Company, Grand Rapids 2, Mich.**

For more details circle #520 on mailing card

## What's New . . .

### Holiday Lighting Fixture Has Prismatic Controlled Light

The comfort of prismatic controlled light is offered in the new Day-Brite



Holiday lighting fixture. Designed specifically for application in low-ceiling areas, the Holiday is an enclosed, surface-mounted fixture. Two injection molded prismatic elements are incorporated in the hinged four-foot enclosure. Lens control provides sufficient upward component to light the surrounding ceiling area.

Holiday is equipped with Rapid-Start ballasts and can be furnished as four-foot or eight-foot units with ends, and eight-foot fill-in section with coupling. Day-Brite Lighting, Inc., 5411 Bulwer Ave., St. Louis 7, Mo.

For more details circle #821 on mailing card

### Aluminum Window Wall Has Sliding Glass Inserts

Designed for installation in institutions, including housing as well as academic buildings, the new horizontal aluminum window wall has sliding glass inserts. The large partition-to-partition window eliminates the need for washing windows from outside. It may be installed with or without aluminum or plastic surfaced, hollow-core insulated panels around the window to finish off the balance of the exterior wall.

Manufactured in heights up to 5½ feet and widths as required for the area to be filled, the window wall is economical in cost. It provides long lines of continuous windows for maximum light while employing standard-sized glass in interchangeable vents. The vents, sliding in stainless steel weatherstripping on nylon roller bearings, provide easy operation of the window. The center compartment can be either fixed or sliding. The sliding vents are easily removed, eliminating the need for exterior glazing.

Luria Building Products, Inc., Bristol, Pa.

For more details circle #822 on mailing card

### Stereoscopic Microscope Has Magni-Changer

A radical new design, called the Magni-Changer, is incorporated into the Cycloptic Series of stereoscopic microscopes.

(Continued on page 70)

A numerically calibrated cylinder in the new unit contains 16 achromatically corrected optical elements. Desired magnifications are "dialed-in" by rotation of the Magni-Changer. All models have inclined, reversible, binocular bodies, wide-field eyepieces and desired auxiliary lens attachments. They are designed for greater comfort and ease of use. Individual preference in tension is allowed with the diagonally-cut rack and pinion focusing adjustment. Long working distances allow examination of extra large specimens.

The Cycloptic Series is available in a wide variety of models, all finished in dove gray Epoxy baked enamel which is



highly resistant to abrasion, mechanical impact and chemical deterioration. American Optical Co., Instrument Div., Buffalo 15, N.Y.

For more details circle #823 on mailing card

**durable**  
AND  
*Smart*  
**FURNITURE**

**Arm Chair**  
No. 505

Also available, a wide assortment of chairs and tables for dormitory, social room, dining room and other uses.

See your dealer or write us for our distributor's name.

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CHAIR COMPANY  
MANUFACTURERS  
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PERMANENT DISPLAYS: Chicago — Space 1630, Merchandise Mart  
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**Correct**  
**Rug & Carpet CARE**  
Wool fibers need Tinolan Process  
**STOP DESTRUCTIVE USE OF**  
**Scrubbing—Soaps—Detergents**

Tinolan process does not mat the pile but restores rugs and carpets previously mistreated.

**COSTS LESS** than scrubbing . . . is easier . . . without removing carpets or rugs . . . no expensive heavy equipment . . . no hard labor.

**CLEANS & FLUFFS** pile fibers . . . no felting . . . maintains new condition . . . and mothproofs too at no extra cost. Safe on twists.

**DEVELOPED** to restore and condition priceless wool rugs and tapestries in one of the country's leading Museums.

Tinolan Process is now used in many leading Colleges and Universities. Write for full information.

**TINOLAN**

The Tinolan Company of America, Inc., Wallingford Rd., Media, Pa.

# What does a Classroom cost ?



All the walls here are MODERNFOLD doors.  
This arrangement permits an infinite number of room-size variations.



they can be as  
inexpensive as the price of a  
**MODERNFOLD DOOR**

The quickest and least expensive way to gain new classrooms is to divide your present space with MODERNFOLD doors.  
**HOW?**

MODERNFOLD doors function as *folding walls*, which will convert one large room into two smaller ones or vice versa. In seconds, these doors fold—or unfold—to give you rooms custom-tailored to your immediate requirements.

MODERNFOLD doors have gained favor with school and college administrators because of their low initial cost, quick installation and lifetime quality. Sturdy, washable vinyl covers MODERNFOLD's all-steel framework. Maintenance is minimal.

These doors have solved space problems in buildings of many types—classrooms, dormitories, gymnasiums and many more. Why not learn where they can be of most help to you? Call your MODERNFOLD distributor.

Several lecture rooms have been created by using MODERNFOLD doors in a large auditorium.

MODERNFOLD distributors  
are listed under "Doors"  
in city classified  
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NEW CASTLE PRODUCTS, INC., New Castle, Indiana • In Canada: New Castle Products, Ltd., Montreal 23 • In Germany: New Castle Products, GMBH, Stuttgart

Vol. 21, No. 6, December 1956

**NEW CASTLE PRODUCTS, INC., Dept. M55,**  
New Castle, Indiana

Please send me full information on MODERNFOLD Doors

NAME

ADDRESS

CITY  ZONE  STATE

## What's New . . .

### Heavy-Duty Range Has Steel Top

The smooth, nickel-plated steel top of the new Hotpoint Superchief range



has three heavy duty round hot plates and two super-fast Calrod units. The "Sealed-Heat" oven base with a temperature range from 200 to 500 degrees has top and bottom heating elements independently controlled. The all-purpose oven is suitable for any baking or roasting operation. Each of the five top cooking units will maintain any of three heats.

The heavy-duty hot plates are made of rugged cast metal and are designed for stockpot work as well as pan cooking. The Calrod units have quickly removable reflector pans and heat instantly with quick response to changes in switch

positions. The Superchief is 36 inches wide and has dimensions matching those of the Hotpoint Superline ranges for installation in series. **Hotpoint Co., Commercial Equipment Dept., 227 S. Seeley Ave., Chicago 12.**

For more details circle #524 on mailing card

### Salvajector Unit Scraps and Discharges Waste

A combination unit that removes scraps from tableware, pre-washes it, and then disposes of the food waste in a single operation is offered in the new model of the Salvajector. The unit can be converted almost instantly for use as a food grinder only, for the disposition of food waste during preparation. The food disposer is a new higher-capacity unit that is non-clogging, due to the new shredding action. It has a capacity of up to 120 gallons of waste per hour.

The new unit is easy to install and maintain, requiring only a single, yearly lubrication. Designed to handle the toughest kinds of food waste, including fish heads, fowl entrails, corn cobs, paper milk cartons and cooked and uncooked bones, the new Model HK Waste-X-It has a large diameter feed chute which easily handles leafy waste. **The Salvajor Company, 7235 Central Blvd., Kansas City 14, Mo.**

For more details circle #525 on mailing card

(Continued on page 72)

### Utilitarian Unit for Art Classrooms

The Westmoreland No. 165-AT Art Desk is a practical and utilitarian unit to take care of all needs in the modern art classroom. The sturdy welded tubular steel frame is stressed and braced for adequate strength, rigidity and streamlined appearance. It is available finished in taupe, turquoise, coral, blue or nickel-chrome. The laminated plastic top adjusts to meet all art requirements and can be used for finger painting as the surface is non-staining. A matching stool is available for use as a seat or as an addi-



tional work area. **Westmoreland Seating Division of Westmoreland Metal Mfg. Co., Milnor St. & Bleigh Ave., Philadelphia 35, Pa.**

For more details circle #526 on mailing card

## INCREASE ROOM FUNCTIONS



Abbott Hall, Northwestern University  
James Gamble Rogers, Arch.

### with *Fairhurst* Unitfold® T.M. Reg. FOLDING WALLS

This installation at Northwestern University illustrates the practical flexibility of space arrangement possible with a Unitfold Wall. Lounge and dining hall may be quickly separated by a rigid, sound-resistant wall that permits simultaneous use of each. For student dances or meetings the wall units fold out of the way to allow clear access between rooms. Used almost daily since 1938; no maintenance required. There is no need for expensive mechanical equipment with Unitfold—all installations are easily operated by one man regardless of size or number of units. Write us.

Photo above shows: center—units partially closed; right—units folded and stacked.

**John T. Fairhurst Co., Inc.**

45 West 45th Street

New York 36, N. Y.

## BATHE YOUR WAY to HEALTH



Millions have taken the baths at Hot Springs—America's only health resort with natural thermal waters under the regulation of the Director of the Nat'l. Park Service, U.S. Dept. of the Interior—and, countless people have testified to the magic qualities of these world-famous baths. You, too, can find relief for jangled nerves, aching muscles, stiff joints, hardening of the arteries, and, yes, even rheumatism and arthritis.

THE

*Majestic*  
HOTEL  
& BATHS

From \$3 per day single  
\$4.50 per day double  
And you can budget your meals  
at \$4.50 a day



**HOT  
SPRINGS**  
NATIONAL PARK,  
ARKANSAS

SEE YOUR TRAVEL AGENT OR WRITE  
THE MAJESTIC HOTEL FOR LITERATURE



*at Carlisle, Pa.*

## **PITTSBURGH • DES MOINES** *Steel Grandstands provide*

**8832 SEATS**

*with security and  
comfort for each  
and every user*

Modern grandstand design, coupled with the strength and economy of engineered steel construction, create a lifetime asset in spectator accommodation for the Carlisle, Pa. School District. Pittsburgh-Des Moines Steel Grandstands are unit-section constructed, adaptable to every stadium requirement, and require only periodic paint maintenance for good-as-new service through the years. Write for our complete grandstand Catalog.



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Plants at PITTSBURGH, DES MOINES, SANTA CLARA, FRESNO, and CADIZ, SPAIN

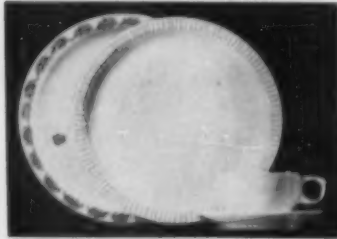
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MADRID, SPAIN .....	Diego DeLeon, 80		

## What's New . . .

### Plastic Dinnerware in Attractive Patterns

Decorated plastic institutional dinnerware is now available in several patterns.



Designed by Joan Luntz, the new patterns in Arrowhead dinnerware were developed to enhance the appearance of food. The two new patterns illustrated are the Militaire, a narrow-rim design with pale pink batons on a base color of red; and the Ambassador, a narrow-rim leaf pattern in Tangerine, Sky Blue, Sunglow Yellow, Black and Mist Green. International Molded Plastics, Inc., Arrowhead Div., 4387 E. 35th St., Cleveland 9, Ohio.

For more details circle #527 on mailing card

### Automatic Laundry Machine Handles Forty Pounds

Forty pounds of dry weight laundry can be washed, extracted and damp dried for ironing in the new completely auto-

matic Triomat laundry machine. When the cycle is set for washing and complete drying, the machine handles 25 pounds of dry weight laundry. The self-contained, automatically electrically controlled unit is designed for use in gymnasiums, residence halls and other buildings.

A large sized gas burner ensures rapid drying of the clothes. No attention is required until it is dry and ready for use. The Triomat is 75 inches high, 45 inches wide and 36 inches deep. Both



tub and cylinder are of stainless steel. Duplex Corporation, 1355 Market St., San Francisco 3, Calif.

For more details circle #528 on mailing card

### AGN 201 Reactor Is Portable, Self-Contained Unit

A relatively small self-contained Nuclear Reactor is now available for use in hospitals, medical schools and medical research centers. The AGN 201 offers a solution, not only for reactor training, but for use as an isotope "refrigerator" from which to obtain short half-life isotopes for existing and future radio-medicine technics. It will also serve as a controlled neutron source for experimental medicine. The foolproof safety system, low power and small comparative size of the AGN 201 permits it to be placed in an ordinary room for a multitude of applications.

An ingenious method of core fabrication with radiation-stabilized polyethylene moderator gives the reactor the resemblance to a liquid homogeneous reactor while it has a solid homogeneous core. The requirement for critical mass is only approximately 600 grams of Uranium 235 of 20 per cent enrichment. The quadruply sealed solid core locks in the fission products, eliminating the problem of waste disposal and prevent-



ing the escape of radioactive contaminants. Every possible effort has been exerted to make the AGN 201 completely safe. Aerojet-General Nucleonics, San Ramon, Calif.

For more details circle #529 on mailing card

## FOR FASTER FLOOR MOPPING *and* REDUCED COSTS...



"FLOOR-PRINCE"  
Mopping Outfit  
for mops up to 24 oz.

... specify *Geerpres* the really  
Efficient Mop Wringer!

See them in action and you'll realize why maintenance men *prefer* a Geerpres to ordinary mop wringers.

They make a tough job easier because of powerful, controlled squeezing action which wrings mops dry in a single operation. Patented design eliminates splashing once-cleaned floors. Moving is effortless because of ball-bearing, rubber casters.

Not only do you save costly labor time, but premium quality materials and construction—such as exclusive corrosion-resistant electroplated finish—assure long service life. Mops last longer, too, without twisting or tearing.

Write now for catalog listing all sizes and types, accessories, and hints for more efficient mopping.

## GEERPRES WRINGER, INC.

P. O. BOX 658

MUSKEGON, MICHIGAN

### Plastic Building Panel Has Granitized Surface

A new manufacturing process, perfected after six years of research, is responsible for the durability of the new Granitized Corrugux plastic building panels. The glass fiber reinforced panels have greatly increased strength and length of life. Advantages claimed for the use of Granitized Corrugux in skylights, sidelights and window panes include longer life at high efficiency, improved appearance and increased economy.

The new "granitizing" process produces a surface of minute facets of tough polyester which protect the glass fiber reinforcements. It affords superior erosion resistance and assures not only improved appearance and longer life but a high quality of light transmission. Corrugux Div., L-O-F Glass Fibers Co., P.O. Box 20026, Houston 25, Texas.

For more details circle #530 on mailing card

(Continued on page 74)

One of a series explaining the successful application of television to education

# ANNOUNCING

## RCA HIGH FIDELITY TELEVISION SYSTEMS FOR EDUCATION

RCA is pleased to present the ultimate in teaching by television. You in the schools, colleges and medical centers have tested the theory. You've proved it works. Now you're ready for complete high-fidelity television systems for education. This is the kind of equipment used by television broadcast stations for consistently high-quality results. It offers you the following advantages:

### HIGH-FIDELITY REPRODUCTION—Sound and Picture

High-fidelity television means that pictures will be the finest that can now be obtained. This applies to reproduction of live subject matter, motion picture film, slides and artwork.

### COMPLETE TV TEACHING STUDIOS

Provides live camera origination in TV "teaching studios" connected to television receivers in classrooms; employment of many different types of course material including integration of films, slides and other audio-visual aids; frequent use of demonstration experiments, and origination of parts of subject matter from remote points . . . thus permitting more effective teaching and making it possible for students to stay in one classroom for a wide range of subjects.

### PROFESSIONAL EQUIPMENT BENEFITS

Permits shifting from one picture source to another smoothly and without "blackouts"; capacity to service



an entire campus or campuses, including scattered buildings or multi-floored structures; adaptability to local station hookups; equipment to make permanent records of course material by means of recordings on tape or film.

### TIME PROTECTED INVESTMENT

Offers growth potential to meet your expanding needs, protecting your investment far into the future. Allows for "block building" initial installation to include more extensive facilities; compatible color television.

If these are the results you are looking for, you'll recognize that RCA High-Fidelity Television Systems for Education are the answer. RCA is in a position to be of real assistance in television planning since RCA manufactures a complete range of equipment. Why not mail coupon today for further information?



**RADIO CORPORATION  
of AMERICA**

**Broadcast and Television Equipment  
Camden, New Jersey**

*In Canada: RCA VICTOR Company Limited, Montreal*

Radio Corporation of America  
Broadcast and Television Equipment  
Educational Administrator  
Dept. M-34, Building 15-1, Camden, N. J.

- ☐ Please send me brochure on RCA High-Fidelity Television Systems for Education.  
☐ Have RCA Television Representative call.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
INSTITUTION \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY AND STATE \_\_\_\_\_



**Collect Wastepaper  
Handle Trash  
Move Supplies**

## YOUNGS Janitor Carts do all three!

Janitor carts offer many advantages in trash and waste-paper collection. Quiet, they raise no dust, roll easily, do not mark floors. Rugged steel frames fold instantly for compact storage.



This welded steel custodial truck carries all the supplies used for school maintenance. Completely rubber bumpered.

These are only two of the 78 utility trucks described in our big catalog.

Write  
today  
for  
free  
catalog  
S-48



**THE PAUL O. YOUNG CO.**  
School Truck Division  
LINE LEXINGTON,  
PENNSYLVANIA

### Guard Chair Tower for Swimming Pool

Advanced features are used in the new guard or supervisor chair towers developed by Swimquip. Three-inch tubu-



lar steel is used for the three-point mounting and the two hand rails are of highly polished chrome plated brass. The contour seat is of molded Fiberglas and is resistant to sun, water and general abuse. The platform surface is Sure-Tread and the overall height of the chair tower is seven feet, one inch. Swimquip, Inc., 3301 Gilman Rd., El Monte, Calif.

For more details circle #531 on mailing card

### Business Classroom Stands With Welded Tubular Frames

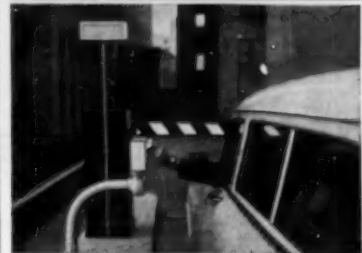
Arch-strut welded tubular steel frames are used in the new line of Hercules all-purpose business classroom stands, student typing tables and instructor tables. They are constructed to resist vibration when used for modern typewriters and business machines and the U-bar bracing prevents leg wobble while affording generous chair and leg room. Frames are finished in baked wrinkle enamel and are available in school beige, gray, black or green. Hercules Classroom Tables are



available for either right or left hand mounting of the typewriter or business machine. Student typing and instructor tables are offered in three heights. Meilink Steel Safe Co., Oakwood & Dawson, Toledo 5, Ohio.

For more details circle #532 on mailing card  
(Continued on page 76)

## RESERVED PARKING with WRRS PARKING GATES



WRRS Electric Parking Gates are so flexible, so dependable, so easy to operate they assure absolute control of your college or university parking lots . . . guaranteeing Reserved Parking for staff on a 24-hour-a-day basis.

Keys, Coins or Tokens operate the gates . . . or any combination of the three. Labor costs are entirely eliminated. Initial cost is low. Installation is easy. Almost no maintenance.

**Special and Exclusive Features**—WRRS, builder of more than 10,000 railroad crossing gates, has engineered into the gates such features as the "Lot Full" sign, the magnetic detector, double key controls for day and night parkers, pushbutton remote controls, automatic counters and others. This enables WRRS to make this offer:

**WRRS Parking Gates Will Be Shipped to Any College or University in the U. S. on**

**OPEN ACCOUNT**

**Subject to Complete Satisfaction of School Management.**



Photos: L.S.U. Medical School, New Orleans, La.

### WRITE TODAY

For descriptive folder detailing information on the various parking lot control plans available, or

### SEND US

A brief description of your lot including dimensions, preferred locations for entrances and exits and a general idea of how you want to control parking. You will receive, without obligation, a parking plan and cost estimate.



**WESTERN RAILROAD  
SUPPLY COMPANY**

General Offices and Factory

2416 South Ashland Ave., Chicago 8, Ill.  
IN CANADA: Cameron, Grant Inc., 465 St. John St., Montreal 1, Quebec



## Movable Cabinets by Brunswick Make OLD Classrooms NEW!



before and after!

Let's face facts. A new school need not *always* be the answer to an old school's limited space problems. Brunswick cabinets provide you with the perfect solution to low-cost modernization.

More and more Brunswick classroom furniture and cabinets are being purchased for this purpose. There are ample reasons. First, you can modernize one room at a time . . . when

funds are available. Brunswick cabinets are factory-built . . . eliminate costly on-the-job construction. They are color-coordinated to suit any surroundings. And they are flexible . . . easily adapted to changing needs.

If low-cost modernization interests you, write: The Brunswick-Balke-Collender Company, 623 S. Wabash Ave., Chicago 5, Illinois.

JUST ONE LINE CONTINUES TO SET THE PACE . . . IT'S

*Brunswick*

## What's New . . .

# MAAS- ROWE

### AMERICA'S BEST KNOWN NAME IN Chimes & Carillons

Year after year, more schools, churches and institutions select Maas-Rowe bells, chimes and clock systems than any other make. The more than 25,000 installations attest to their superiority.

**HEARING IS BELIEVING!** If you are considering the purchase of bells, chimes or accessories, regardless of size, insist on hearing the actual instrument. Let your own ears be the judge.

One of our nearby dealers will be glad to arrange a demonstration. Write for complete details . . .

**MAAS-  
ROWE  
Carillons**

3015 Casitas Ave.  
Los Angeles 39, Calif.

## monroe FOLDING BANQUET TABLES



Direct Prices &  
Discounts to  
Schools, Churches,  
Clubs, Lodges and  
All Organizations

COMPLETE CATALOG  
ON REQUEST

### TRUCKS FOR FOLDING TABLES



Monroe TS (transport - storage) Trucks make handling and storing of Folding Tables easy and quick. Combination offers.

### STEEL FOLDING CHAIRS



Monroe Steel Folding Chairs in attractive range of styles, sizes and prices. Excel in comfort, easy handling and durability. Also full line of non-folding chairs, desks and combinations for classroom, cafeteria and church school use.

### PORTABLE PARTITIONS



Monroe's new movable partitions change idle space into useful areas. Smooth Masonite panels, tubular steel frames. Swivel pedestals, casters or glides.

**THE MONROE COMPANY**  
77 Church St. Colfax, Iowa

### Study Top Desk For Student Comfort

Griggs Model 786 Study Top Desk has been designed with student comfort



in mind, yet is sturdy and durable. The seat and back are constructed of curved hardwood plywood and the front legs are located forward for unhampered leg room. A rear-opening book box is housed under the 17 by 22 inch hardwood plywood desk top. The design makes the unit hard to tip and gives it an overall balance. The tubular steel frame is finished in sage green, dove grey, coral, ocean blue or beige. Griggs Equipment, Inc., Box 630, Belton, Tex.

For more details circle #533 on mailing card

### Typewriter Desk in Three Styles

Three styles, each in two sizes, are available in the new Combination Typewriter Commercial Desk. Sizes include 18 inches deep by 36 inches wide or 18 inches deep by 48 inches wide. All desks have non-warp Fibersin solid plastic



tops  $\frac{3}{4}$  inch thick. Frame work is  $1\frac{1}{4}$  inch square steel tubing.

The styles include the No. 100 desk with the typewriter section adjustable in height at three fixed positions—25, 27 and 29 inches. The No. 200 is adjustable to any height from 25 $\frac{1}{2}$  to 29 inches. A one piece non-adjustable Fibersin flush top with full length book box with a partition in the center is offered in the No. 300 desk. Smith System Mfg. Co., 212 Ontario St. S. E., Minneapolis 14, Minn.

For more details circle #534 on mailing card  
(Continued on page 80)

## INVESTIGATE THESE *very good* REASONS WHY YOU SHOULD INSTALL

**SANITARY  
NAPKIN  
DISPOSAL  
SERVICE**



**1**

**Attracts Discreet Feminine Travelers**  
Sanibag Service provides a modest means of sanitary napkin disposal. Pleasing to discreet women.

**2**

**Avoids Costly Toilet Stoppages**  
Sanibag Service pays off in money saved in plumber's bills. Overall maintenance costs are thus reduced.



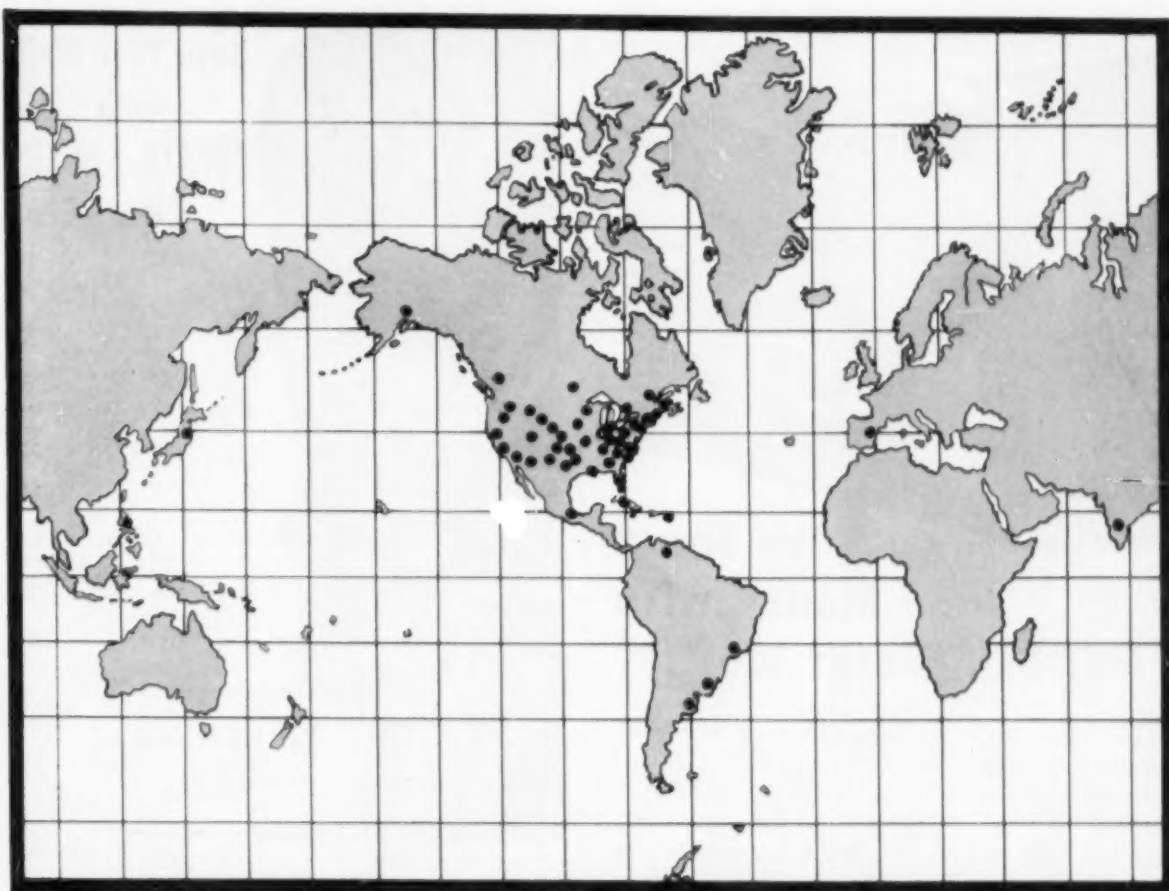
Attractive cabinet dispenser makes use of Sanibags convenient and economical. A must in hotels and all public buildings. Write for FREE SAMPLE and complete information.

**Bier & Company**  
405 SOUTH GREEN STREET  
CHICAGO 2, ILLINOIS

### Please care . . .

In America we store our farm abundance. Throughout the world, millions of people are hungry. For just \$1, CARE will deliver a 22-lb. Food Crusade package of U.S. surplus, in your name, to a needy family overseas.

Because you care the hungry will be fed; our unused food will fulfill its life-giving purpose, and strangers in a far-off land will know that Americans, and America, are their friends. Mail your dollars to CARE Food Crusade, 660 First Ave., New York 16, N.Y., or your local CARE office.



## ***Ric-wil offers WORLD WIDE Service for Prefabricated Piping Systems***

Over 75 field offices, both national and international are at your disposal on any project dealing with prefabricated piping systems. These field representatives offer on the spot assistance in planning, delivering and installing underground or overhead piping. A Ric-wil representative will be glad to discuss plans involving steam, hot water or oil distribution lines . . . and he represents the world's largest supplier of prefabricated piping systems.

*For the name of your nearest representative or the catalog covering the Ric-wil line, call or write the home office.*



*Quality Piping Systems . . .  
... of Exceptionally High Thermal Efficiency  
SINCE 1910*



**PREFABRICATED INSULATED PIPING SYSTEMS**

**BARBERTON, OHIO**

**IN CANADA: THE RIC-WIL COMPANY OF CANADA LIMITED**



## Save Space and Money with MENDEL Closet Walls!

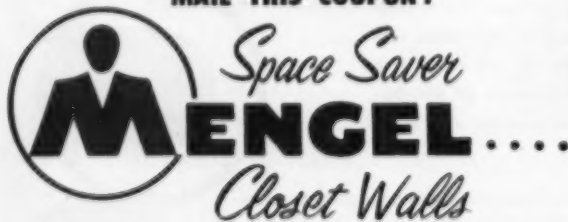
Mengel Closet Walls are factory-built modular units, shipped K.D. in individual cartons, in 2', 3', 4', 5' and 6' widths. They are all 91½" high, to permit tilt-up installation with 8' ceilings.

They are easily installed in almost any combination in place of conventional walls, thereby saving floor space and money. They are also widely used as extra closets in existing buildings.

- ▶ Provide more living space without loss of closet space!
- ▶ Cost less than conventional plaster or dry wall closets!
- ▶ Interiors equipped with rods, divider partitions, shelves and drawers, as desired. Built-in chest and desk units available on quantity orders!

- ▶ Mengel's exclusive roller hanger is easily and quickly adjusted with one screw!
- ▶ Hardwood frames with Gum, Birch or Mahogany plywood exteriors!
- ▶ Field-proved in thousands of institutions, apartments and homes!

MAIL THIS COUPON!



The Mengel Company  
814 West 25th Street  
Winston-Salem, N. C.

Gentlemen: Please rush me full details about Mengel Closet Walls.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



## Save Your Walls with "WALL-SAVER" CHAIRS



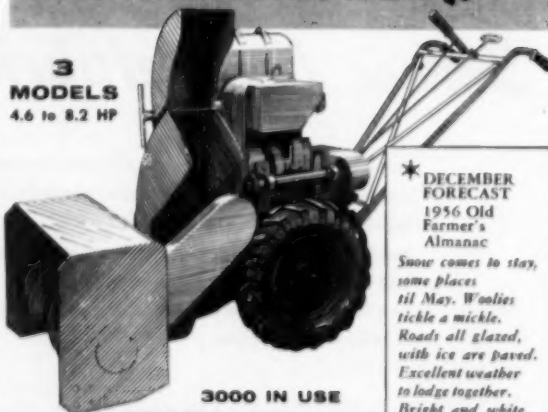
These chairs pay for themselves by protecting walls from damage. Their flared back legs prevent "rocking" or tipping — chair can't scratch walls and woodwork. Sturdy and long-lived — solid birch construction. One piece steam bent apron and stretcher, reinforced corners. Metal cushion glides. All finishes available. Back height, 14½". Seat height, 18½". Weight, 18 lbs.

Write for Bulletin 1005-A

**EICHENLAUBS**  
Contract Furniture

3501 BUTLER ST., PITTSBURGH 1, PA.  
ESTABLISHED 1923

## Severe Winter Ahead\* ... get your MAXIM SNOW THROWER NOW



3  
MODELS  
4.6 to 8.2 HP

3000 IN USE  
DEALERS WORLDWIDE  
A PROFESSIONAL MACHINE

THE  
**MAXIM**  
SILENCER COMPANY

85 Homestead Ave., Hartford, Conn.  
Subsidiary of Emhart Manufacturing Company

\*Write for folder

\* DECEMBER  
FORECAST  
1956 Old  
Farmer's  
Almanac

Snow comes to stay,  
some places  
til May. Woolies  
tickle a mickle.  
Roads all glazed,  
with ice are paved.  
Excellent weather  
to lodge together.  
Bright and white,  
zero at night,  
cold winds bite.







Day-Brite Luvex fixtures, suspended from Day-Brite A-J hangers. Note uniform light distribution over all seeing areas.

Where light is  
needed most  
... Day-Brite

Comfortable, evenly distributed light is essential in today's classrooms. For two reasons: (1) To safeguard children's priceless sight; (2) To make learning-through-seeing easier, faster... Realizing this, many school authorities choose Day-Brite lighting—in fact, more schools are lighted with Day-Brite Luvex® fixtures than any other make.

There are many reasons for this wide preference. Reasons your Day-Brite representative will gladly explain—and prove. Consult him on any original or relighting problem. He's listed in your classified telephone directory. Or, send for Day-Brite school-lighting data.

Day-Brite Lighting, Inc.  
5452 Bulwer Ave., St. Louis 7, Missouri

Nation's largest manufacturer of commercial  
and industrial lighting equipment



61150



Tootin' Hills Elementary School, Simsbury, Conn. ... Architects: Ebbetts, Frid & Prentice; Consulting Engineer: Paul D. Bemis

## What's New . . .

### Eighteen Items in Matched Food Service

The new Dixie Matched Food Service for schools features eighteen colorful



items in paper. Included are plastic-coated and uncoated plates sturdy enough to withstand cutting of meat and to resist absorption; cream and condiment cups in three sizes; cold drink cups in three sizes; food dishes in two sizes; food containers; plastic-coated hot drink cups with handles in two sizes, and a cone-shaped cup for milk.

Advantages claimed for use of the new matched service include elimination of breakage, quiet food service, quick clean-up with savings in time and dishwashing, minimum storage space and light weight. The service is offered in a pleasing pastel green and is completely disposable. Dixie Cup Co., 24th and Dixie Ave., Easton, Pa.

For more details circle 22536 on mailing card

### Laboratory Incubator Is Compact and Efficient

Designed for every laboratory use, the Incubaril is an economical and compact incubator. It is small enough to stand on a table or hang on the wall, yet has five shelves and can accommodate ten culture dishes or 54 test tubes. The removable shelves can be used separately if desired.

A temperature range of from 20 to 60 degrees C. is precisely maintained through an automatic thermostat to ensure exact temperature control. The built-in thermometer is placed for easy reading and



the cabinet is protected against the danger of overheating by an overload device. Instrumentation Associates, 17 W. 60th St., New York 23.

For more details circle 22536 on mailing card

### Interlocking Slats Give Maximum Light Control

A new development in its design gives Eastern's Star Venetian Blind a new appearance with maximum darkness for use in audio-visual classrooms. Improved control over light and air is also possible with the double-arc slats which flow together, giving the blinds a one-piece look. The interlocking slats keep out all light as the matching notches in slats and cross ladder tapes achieve exact fit. Extra flanges on head channel and brackets act as light traps above the top slat. Side and bottom channels may be mounted on sills for virtually complete blackout.

When open, the new blinds give maximum visibility since the wider slats give increased width between the opened slats. The sturdiness of the slats makes fewer tapes necessary for firm control. More air and light enter through the wider-spaced slats and tapes and light rays are diffused softly by double-arc deflection. The one-piece closure creates air-pocket insulation between blind and window, helping to keep the classroom tempera-



ture from falling unduly when they are closed at night. An exclusive method of applying Du Pont colloidal silica anti-soil compound, Ludox, to Eastern's Star slats helps to keep them clean. The Eastern Venetian Blind Co., 1601 Wicomico St., Baltimore 30, Md.

For more details circle 22537 on mailing card



Cooler with side fountain, one of many distinctive types

### In Warren, Ohio

Architect Sidell has provided a design that affords plenty of natural light and air and an abundance of class-room space. In keeping with his selection of the best materials and equipment is



Bascom Elementary School, Warren, Ohio  
Architect: Arthur F. Sidell, Warren  
General Contractor: Campbell Construction Co.

the choice of Halsey Taylor fountains and coolers.

**HALSEY TAYLOR**

*America's Favorite*  
**Fountains**



...The Halsey W. Taylor Co., Warren, O.

5-61

### Weldwood Tackboard Has Plastic Surface

The self-sealing properties of embossed Kalistron with a facing of bur-lap weave contribute to the tack-holding qualities of the new Weldwood Tackboard. The transparent vinyl plastic sheet has the color fused to the underside, protecting it from abrasive wear and marring. It resists scratching and scuffing and will not chip, crack or peel. The new board is resistant to moisture, vermin, rot and decay and has an overall thickness of 9/16 of an inch. Weldwood Tackboard, companion product to Weldwood Chalkboard and Weldwood Aluminum Chalkboard Trim, is offered in old blue, Wedgewood blue, gray green and pastel green. United States Plywood Corp., 55 W. 44th St., New York 36.

For more details circle 22538 on mailing card

(Continued on page 82)

*in a class by itself . . .*



## **Burroughs Sensimatic Accounting Machine makes short and easy work of your every general and budgetary accounting job!**

Budgets, payroll, students' accounts, athletic department accounting . . . yes, now you can handle these and countless other jobs faster and more easily than you ever thought possible—thanks to the Sensimatic.

What makes a Sensimatic so extra special? Briefly, its many, many automatic speed features which cut down (way down!) on manual operations and operator decisions . . . features that make a Sensimatic so simple to operate that beginners quickly become expert. And the most work-saving of these is the *exclusive* four-job control panel. Here's why:

It automatically directs your Sensimatic through every accounting operation. And to switch from job to job, you simply turn a knob. Any wonder that

users tag it the most efficient, most versatile accounting machine made?

What's more, the time and effort you save with a Sensimatic cuts your accounting costs right to the bone. And your initial investment? That's surprisingly low, too! More to this story? Of course! Call our nearest branch office . . . or write to: Burroughs Corporation, Detroit 32, Michigan.

*Wherever There's Business There's*

"Burroughs" and "Sensimatic" are trademarks





## What's New . . .

### Literature and Services

- The complete line of Hamilton Laboratory Furniture is described in **Catalog No. 218** released by Hamilton Mfg. Co., Two Rivers, Wis. Each item is fully illustrated along with complete details and specifications. The 88-page catalog contains information on all types of laboratory equipment as well as fixtures and accessories.  
For more details circle #539 on mailing card

- The catalog folder on **Mercury fluorescent lighting fixtures** has been revised by Smithcraft Lighting Division, Chelsea 50, Mass. The new folder contains construction details, photometric data and complete specifications of the Mercury fixtures.  
For more details circle #540 on mailing card

- Designed as an idea booklet to aid those responsible for setting up a functional homemaking department, "**Planning Homemaking Classrooms for Schools**" has been prepared by St. Charles Mfg. Co., St. Charles, Ill. Floor plans, suggested layouts of equipment, hints on color and decoration as well as an architect's supplement listing exact dimensions and specifications are included in the colorful booklet.  
For more details circle #541 on mailing card

- The **Studlock Clip System** for the erection of non-combustible, non-bearing plastered partitions is illustrated and described in a four-page folder available from Penn Metal Co., Inc., 205 E. 42nd St., New York 17.  
For more details circle #542 on mailing card

- The story of the "**Flexalarm Fire Alarm System**" is told in **Bulletin No. F249, Flexalarm Section II, Technical**, available from The Gamewell Company, Newton Upper Falls 64, Mass. The Flexalarm Manual states that "The name Flexalarm is applied to a complete line of fire alarm components designed to comply with the recommendations of the various Federal, National and State authorities concerned with the approval and operation of fire alarm facilities."  
For more details circle #543 on mailing card

- A new Folder entitled "**Photographic Interpretations of Grades of Northern Hard Maple Flooring**" describes pattern characteristics of three Maple grades and includes a digest of official grading regulations and uses of each standard grade. It is available from Maple Flooring Mfrs. Assn., 35 E. Wacker Dr., Chicago 1.  
For more details circle #544 on mailing card

- "**Are You Building or Remodeling?**" is the title of a folder released by Western Underwriters Assn., 175 W. Jackson Blvd., Chicago 4. It includes an invitation to submit building plans for review, without cost or obligation, on which suggestions will be made with a view toward obtaining the lowest possible fire insurance cost.  
For more details circle #545 on mailing card

- Information on the performance-economy and efficiency of air hand dryers is presented in a folder prepared by World Dryer Corp., 616 W. Adams St., Chicago 6. Included in the brochure are figures indicating the savings effected through use of the **high-speed dryers**, as well as names of users of the equipment.  
For more details circle #546 on mailing card

- "**How to Remove Stains from Floors**" is the title of a new booklet issued by Huntington Laboratories, Huntington, Ind. The booklet lists steps for general stain removal from all floors and then gives instructions for specific types of floors.  
For more details circle #547 on mailing card

- The Building Construction Employers' Association, 228 N. La Salle St., Chicago 1, has published a booklet on "**True Efficiency in Building**" for use by architectural administrators contemplating building programs. The booklet contains a check list on the various phases of a construction program and answers 20 questions on building.  
For more details circle #548 on mailing card

- "**Lightning—Its Behavior and What To Do About It**" is discussed in simple terms in a booklet by H. M. Towne, retired manager of G. E.'s Lightning Protection Section. Copies are available from the St. Louis Lightning Protection Co., 200 S. Jefferson Ave., St. Louis 3, Mo.  
For more details circle #549 on mailing card

- Comprehensive technical information on the complete range of **Barnstead Water Stills** is available in a new 48-page catalog published by the Barnstead Still & Sterilizer Co., 124 Lanesville Terrace, Boston 31, Mass. A pictorialized description of "How a Barnstead Still Operates" is a feature of the catalog.  
For more details circle #550 on mailing card

- **Trion Electronic Air Cleaners** for installation in ventilating system air returns for dirt removal are described in a catalog available from Trion, Inc., 1000 Island Ave., McKees Rocks, Pa. The new 12-page booklet also contains complete engineering data, size and capacity tables and component parts information of particular interest to engineers and architects.  
For more details circle #551 on mailing card

- **Wear-Ever Aluminum** for institutional and industrial use has been cataloged by The Aluminum Cooking Utensil Co., Inc., New Kensington, Pa. The 83-page catalog describes and illustrates seven general lines of equipment and includes complete specifications.  
For more details circle #552 on mailing card

- The new **AMF Lowerator Mobile Refrigerated Milk Carton and Bottle Dispenser** is described and illustrated in a four-page folder offered by American Machine & Foundry Co., 261 Madison Ave., New York 16.  
For more details circle #553 on mailing card

- Sixty-two models of **Howell Modern Metal Furniture** are shown in the new six-page folder released by The Howell Co., Division of Acme Steel Co., St. Charles, Ill. Full color illustrations of the attractive modern furniture in use in lounges and lunchrooms are shown on the covers. Also available is a folder on "**Furniture Proposal**" with templates of all Howell pieces for planning furniture arrangements.  
For more details circle #554 on mailing card

- Complete engineering data is contained in a new hot water supplement, "**Perimeter Piping Systems for Forced Hot Water Heating with Classroom Unit Ventilators and Matching Convectors**." Bulletin No. 600-E1A is available from Herman Nelson Ventilator Products, American Air Filter Co., Louisville, Ky.  
For more details circle #555 on mailing card

- The 1956 catalog of "**Onan Electric Plants**" is available from D. W. Onan & Sons, Inc., 6251 University Ave., Minneapolis 14, Minn. **Catalog A-428** describes and illustrates the complete line of electric generating plants giving starting methods, type of engine, and dimensions and weights. Optional accessories available for each unit are also included.  
For more details circle #556 on mailing card

- The "**Dietary Catalog Section**" is the first in a series of complete food service equipment catalog information to be offered by Jarvis & Jarvis, Inc., Palmer, Mass. This 20-page dietary section describes dish and utility trucks, dish storage trucks, nesting trucks, tray trucks, electrically heated tray conveyors, ice trucks and kitchen trucks.  
For more details circle #557 on mailing card

- Nearly 200 16 mm sound films available on free loan are described in the "**Pocket Guide to Free Films**." The booklet is available from Modern Talking Picture Service, Inc., 3 E. 54th St., New York 22.  
For more details circle #558 on mailing card

- Prize-winning sandwich recipes are given in a new 20 page booklet issued by Standard Brands, Inc., Institutional Dept., 625 Madison Ave., New York 22. Entitled "**Four Star Sandwiches**" the booklet is designed for restaurant operators but should prove of interest to those responsible for menu planning in colleges and other institutions.  
For more details circle #559 on mailing card

### Supplier's News

**Wayne Iron Works, 147 N. Pembroke Ave., Wayne, Pa.**, manufacturer of rolling gymstands, outdoor grandstands and folding partitions, announces a new **Gymnasium Seating Advisory Service**. Professional experience in the field is being made available without cost or obligation to school officials, architects and engineers contemplating gymnasium seating facilities.



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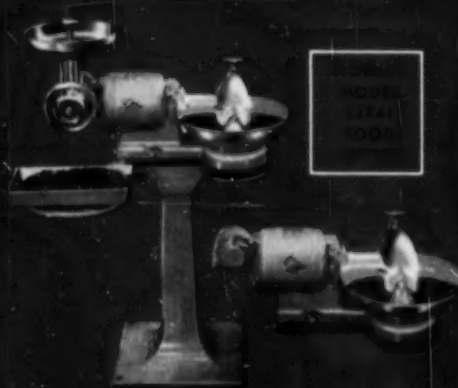
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See your Hobart representative or write for free booklet in full color—Form 1-656

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